



U.S. Army Corps  
of Engineers

Water Resources Support Center  
Institute for Water Resources

# Navigation Operation and Maintenance:

*Expenditures for  
Harbors and  
Waterways*

*Fiscal Year 1996*

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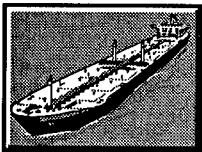
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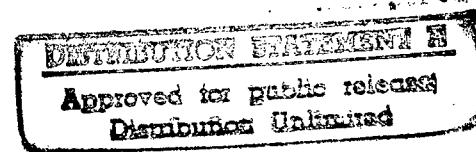
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**NAVIGATION OPERATION AND MAINTENANCE:  
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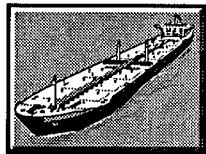
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## **Navigation Operation and Maintenance: Expenditures for Harbors and Waterways Fiscal Year 1996**

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### **PREFACE**

#### **Overview**

This report documents the actual Fiscal Year FY 1996 expenditures for the operation and maintenance (O&M) of U.S. Army Corps of Engineers navigation projects. These costs were developed using the Corps Navigation Cost Recovery Database System (NCRDBS). The NCRDBS was established by the Headquarters, U.S. Army Corps of Engineers (HQUSACE) in 1981 to help evaluate proposed navigation cost recovery legislation. The NCRDBS contains operation and maintenance expenditures dating from Fiscal Year FY 1977 for commercial navigation, other and joint purposes for all projects with navigation as an authorized purpose.

The database is organized into three components: deep draft navigation projects subject to the Harbor Maintenance Tax (HMT); shallow draft harbor projects subject to the Inland Waterway Fuel Tax; and shallow draft projects not subject to the fuel tax. Navigation O&M costs for deep draft projects and shallow draft harbors not subject to the fuel tax are recovered from the Harbor Maintenance Trust Fund (HMTF).

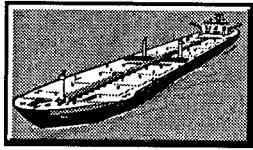
The NCRDBS is updated annually over a cycle of three increments: (1) "preliminary" O&M cost estimates for the next fiscal year based on the Corps initial budget submission to the Office of Management and Budget (OMB); (2) actual prior year expenditures, and (3) "final" estimated costs for the next fiscal year in connection with the release of the President's budget.

As part of this annual cycle, the Corps Institute for Water Resources (IWR) coordinates the aggregation of prior year O&M expenditures with HQUSACE and all District and Division Construction-Operations offices at the beginning of each fiscal year. Estimates of future year O&M expenditures are initially developed based on the Corps budget request to OMB, and are finalized upon release of the President's budget request.

IWR maintains, updates, analyzes and reports on the NCRDBS for HQUSACE, and actively uses it on a variety of navigation-related studies. The data is used annually by both OMB and Congress in the preparation of the Corps budget, and is also used by the Civil Works Policy Division and U.S. Customs Service to implement and administer the Harbor Maintenance Tax established by Water Resources Development Act (WRDA) of 1986. The U.S. Department

of Agriculture has used the inland waterway portion of the NCRDBS in several Congressionally mandated studies of government support to agriculture.

The NCRDBS has also been employed by the Corps in several of its national studies that examined navigation O&M. These include work on the potential recovery of inland waterway O&M costs, the National Dredging Needs Study of Ports and Harbors, and the recently completed Dredged Material Disposal Policy study. Currently, the O&M costs are being used by the Operations, Construction and Readiness Division's Cost Reduction Task Force in the development of performance-based discriminators for the evaluation of Corps navigation projects.



## **Navigation Operation and Maintenance: Expenditures for Harbors and Waterways Fiscal Year 1996**

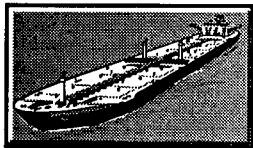
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### **ACKNOWLEDGMENTS**

The 1996 update of the NCRDBS and this report were prepared by Mr. Jack Lane and Mrs. Margaruiette Olson of IWR's Navigation Analysis Division. Mr. Lane and Mrs. Olson are responsible for maintaining the database and generating its various annual reports. Some of the analysis herein applies and extends the work of Mr. William Holliday of IWR's Policy and Special Studies Division in connection with the Section 216 Dredged Material Disposal Policy Study. This report was developed under the direction of Mr. Robert Pietrowsky, Chief of the Institute's Navigation Analysis Division.

The NCRDBS outputs are the direct result of the COEMIS data provided by Mr. David Harmon of the HQUSACE Operations, Construction and Readiness Division (CECW-O) and Mrs. Linda Stoutenburgh of the USACE Finance Center. Project specific data on 1996 O&M expenditures were provided by representatives from Division and District Construction-Operations offices throughout the nation.

HQUSACE policy guidance and oversight of the NCRDBS was provided by Mr. DuWayne Koch of the Civil Works Policy Division and Mr. Barry Holliday, Chief of CECW-O's Dredging and Navigation Branch.



**Navigation Operation and Maintenance:  
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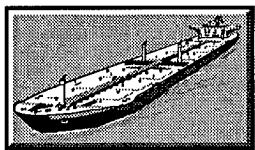
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## Navigation Operation and Maintenance: Expenditures for Harbors and Waterways Fiscal Year 1996

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### EXECUTIVE SUMMARY

#### FY 1996 Results

In FY 1996 *total navigation O&M expenditures* for waterways and harbors reached a record **\$1,012 million**, of which **\$536 million or 53 percent was for harbors** and **\$476 million or 47 percent was for waterways** and (Table 1). The FY 1996 total represented a *four percent increase over FY 1995* and a *one percent increase from FY 1994* in actual dollars. However, this net increase in actual spending can be traced to the *growth in O&M expenditures for deep and shallow draft (non-fuel tax) harbors*, which mask a retreat from the record totals of inland waterways O&M posted in FY 1994-1995. *Waterways O&M costs declined by \$11 million* in FY 1996 compared to the average for the two previous years, but were still well above the \$441 million average for FY 1991-1995. (see Section 2.2 for additional detail).

The *four percent increase* in FY 1996's total navigation O&M expenditures compared to FY 1995 stems from a *ten percent increase in deep draft* navigation costs and *17.7 percent increase in shallow draft* harbor expenditures, while O&M spending on the *inland waterways fell by almost three percent*. The **deep draft navigation** O&M actuals for FY 1996 (**\$461.7 million**) represents the *highest amount* recorded for this category, while the **\$74.4 million for shallow draft harbors** stands third to the spending totals of FY 1994 (\$82.9 million) and FY 1988 (\$77.3 million).

FY 1996 actual total navigation costs were about **\$27 million below** the *estimate in the President's budget* of **\$1,039 million** as all three project types shared in the cost savings. (Table 1). Waterways were below estimate by \$16 million, deep draft harbors by \$2 million, and shallow draft harbors by approximately \$9 million.

*Total navigation O&M expenditures (in actual dollars) have steadily grown over the last twenty years*, with the FY 1996 costs representing a 134 percent increase or \$579 million over the FY 1977 total (Figure 1). This overall gain is the result of deep draft navigation O&M costs increasing by 115 percent, shallow draft harbor expenditures growing by 140 percent, and inland waterway O&M spending increasing by 154 percent since FY 1977. (Section 2.2.1).

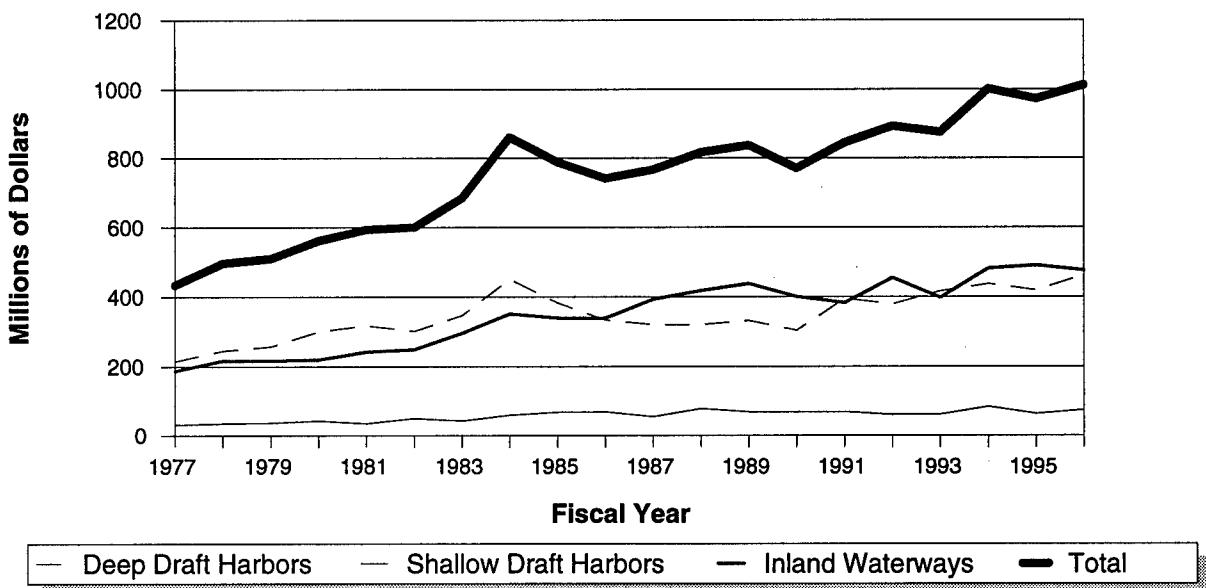
Within this overall growth there has also been a *gradual shift of the relative spending share from deep draft harbors to inland waterways (Figure 1)*. Navigation O&M outlays for deep draft harbors exceeded those for inland waterways O&M for every year between 1977 and

**TABLE 1**  
**NAVIGATION O&M EXPENDITURES**  
**SUMMARY FOR HARBORS AND WATERWAYS**  
**(FY 1996 ACTUAL AND ESTIMATED COSTS AND SELECTED HISTORICAL DATA)**

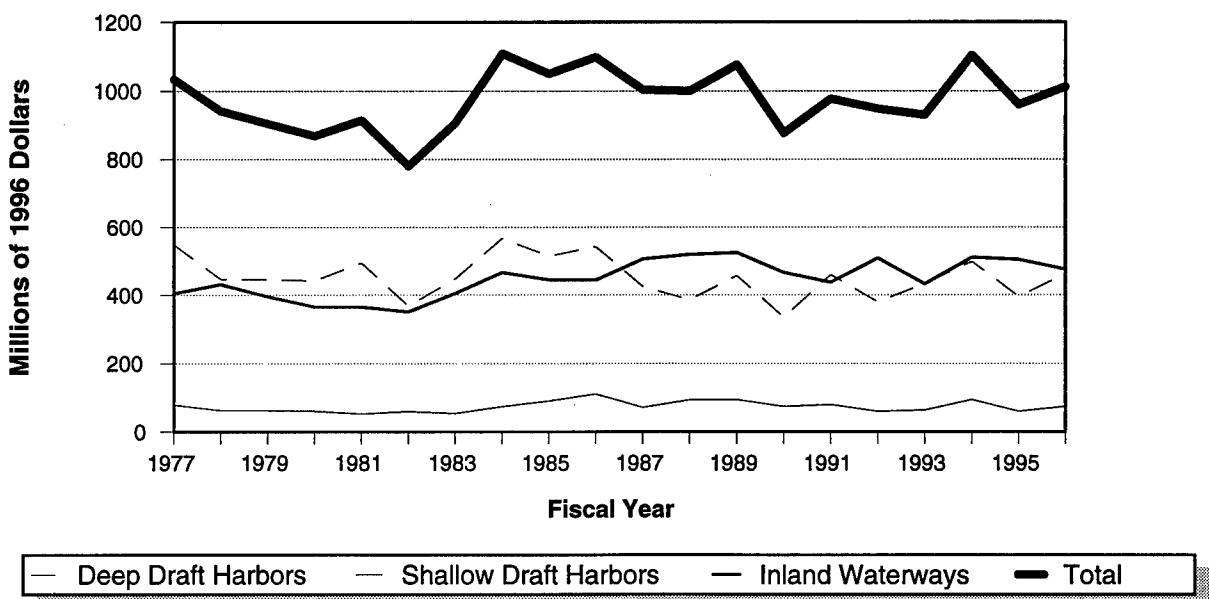
NAVIGATION CATEGORY	ACTUALS (\$'000)			PRES. BUDGET		ANNUAL AVERAGES (\$'000)			
	1977	1994	1996	EST. 1996	1977-96	1977-86	1987-96	1987-98	1991-95
HARBORS									
DEEP DRAFT	214,669	436,277	418,893	461,722	463,693	346,324	314,784	377,864	408,618
SHALLOW DRAFT	30,925	82,920	63,234	74,264	83,340	56,974	46,316	67,631	67,067
COST RECOVERY									
SUBTOTAL	245,594	519,196	462,126	535,986	547,033	403,297	361,100	445,491	475,688
INLAND									
WATERWAYS	187,709	481,563	489,715	475,960	492,388	349,201	265,659	432,743	440,784
NIVIGATION TOTAL	163,304	1,000,159	971,811	1,011,946	1,039,421	752,499	626,760	878,239	916,469
NAVIGATION TOTAL (CONSTANT 1996 \$)	1,033,191	1,103,379	959,561	1,011,946	1,039,421	974,413	960,329	988,497	988,238

**SOURCE:** Actual and estimated amounts from the Navigation Cost Recovery Data Base System (NCRDBS), USACE, Institute for Water Resources;  
 annual averages from IWR-N staff calculations; 1996 constant dollar amounts based on use of Dredging (Inland Waterways), EM110-2-1304.

**Figure 1**  
**Corps of Engineers Navigation O&M Expenditures**  
**(Actual \$'s) - Historical**



**Figure 2**  
**Corps of Engineers Navigation O&M Expenditures**  
**(Constant 1996 \$'s) - Historical**



1985. However, beginning in 1986, O&M costs on the inland waterways have exceeded spending for deep draft harbor projects for all but one year (1993).

The higher costs of waterways for the last ten years and their greater relative share of navigation O & M expenditures can be partially attributed to major rehabilitation, major maintenance, and new waterway projects. A comparison of costs for specific waterways in 1983 and 1989 shows there were six waterways with increases of greater than \$10 million and five with increases of \$3 to \$8 million. For the Upper Mississippi, Ohio, and Illinois major rehabilitation comprised one-half or more of the cost increase. Starting in FY 1993 new major rehabilitation projects were funded under the Construction General appropriation, and the overall cost of continuing major rehabilitation funded under O & M began to decline as projects were completed.

The completion of new waterway projects has contributed to the growth of inland navigation O&M costs. In FY 1989 navigation O&M costs for the Tennessee - Tombigbee Waterway cost \$13.7 million more than in FY 1983 and costs for the Red River Waterway had increased by \$3.1 million over the same period. By FY 1996 the navigation O & M costs for the two new projects totaled almost \$23 million.

Major maintenance costs on the waterways, which began to rise substantially after 1985, especially on the Upper Mississippi and Illinois, are a reflection of aging facilities. By the year 2000 about 40 percent of inland waterway lock chambers will have exceeded their 50 year design lives, including many heavily used locks on the Upper Mississippi and Illinois Rivers. Major maintenance costs are expected to reach a fifteen year total of about \$350 million by the year 2000.

When total navigation O&M expenditures over the period of analysis are examined in *constant (1996) dollars*, quite a different picture emerges (Figure 2). In constant dollars total average annual navigation O&M costs for the last ten years (FY 1987-1996) are only three percent higher than the first ten years; the **FY 1996 navigation O&M total of \$1,012 million** is only four percent above the average annual spending of \$974 million of the FY 1977-1996 period.

*In 1996 dollars, overall navigation O&M spending has exceeded the \$1 billion level eight times over the twenty year period of record. Five of those years occurred between FY 1984 and FY 1989, with the highest total being \$1,108 million in 1984.* In fact, in real terms, the FY 1996 navigation O&M total is approximately equal to the FY 1977 amount of \$1,033 million, with the major difference being the shift in relative spending from deep draft O&M to O&M for inland waterways, as discussed above. (Section 2.2.2).

In FY 1996 the navigation O&M costs *subject to recovery from the HMTF* reached a **record \$536 million**, up by 11 percent from FY 1995. This increase continues the general trend of growth reflected over the last ten years, with the yearly average recoverable costs for the period FY 1991-1995 (\$475.7 million) representing a 22 percent increase over the \$388.4 million average during the previous five years (FY 1986-1990). This growth has been totally within the deep draft navigation category: O&M expenditures for deep draft harbors for the period FY 1991-1995 averaged \$408.6 million, up 27 percent from the \$321.4 yearly average during FY 1986-1990. In

contrast, the average annual shallow draft O&M expenditures has remained at approximately \$67 million over the last ten years. (Section 2.2.3)

Expenditures in FY 1996 for the ten highest cost projects accounted for a 35 percent share of deep draft projects and 26 percent of shallow draft projects (Sections 2.3 and 2.4). Over the past six years the relative share of costs for the ten most expensive deep draft harbors and waterways has declined about seven percentage points. Deep and shallow draft projects in ten states represented about 70 percent of the harbor costs. (Section 2.5).

FY 1996 expenditures for the ten-highest cost waterways were almost \$352 million or almost three-fourths of the total for all fuel-taxed waterways (Section 2.6). The most expensive was the Upper Mississippi at \$89 million, followed by the Ohio River, Lower Mississippi River, and the Gulf Intracoastal (GIWW), costing \$57 to 36 million. There has been a steady decline from 81 to 74 percent in the share of total waterway O&M costs for the ten highest cost waterways over the FY 1991-96 period, in part due to the relative stability in costs for many of these waterways (Section 2.6).

Navigation project performance measures were generated based on each projects annual average O&M for the period FY 1977-94 and recent waterborne traffic activity (FY 1992-94). The overall deep draft and shallow draft project portfolios averaged about 16.5 cents and 46.5 cents per ton, respectively, in terms of annual O&M costs per ton of waterborne commerce per project. As a group, the deep draft projects averaged approximately \$405.5 million in O&M costs per year, with almost eighty projects averaging more than \$1 million O&M per year. The shallow draft group tends to possess lower O&M and traffic levels and also less frequent O&M. The shallow draft the group averaged \$57.4 million in average annual O&M, or about \$140,000 per project (Section 2.7).

Performance on the inland waterways system is not directly comparable to ports and harbors because O&M costs are aggregated by waterway segment and traffic data is measured in ton-miles as a more meaningful utilization measure. The overall cost per ton-mile for the inland waterway segments is 0.16 cents, with the highest cost waterways having very low to moderate O&M costs per ton-mile (Section 2.7).

## **Organization of Report**

The remainder of this report is organized into two chapters consisting of text and summary tables followed by a series of tabs which include the NCRDBS tables of navigation O&M expenditures for FY 1996. Chapter I consists of background material on the NCRDBS, including a brief history and description of the database, its intended purpose, how the various O&M cost reports are organized, what O&M costs are captured by the system, and how these O&M costs are allocated to navigation.

Chapter II presents a discussion and overview of the results for 1996, focusing on the "actual" expenditures for navigation O&M. Previous NCRDBS results dating from 1977 are also presented. The 1996 NCRDBS tables are included in **Appendices A-H** while **Appendices I-J**

match project O&M expenditures and waterborne commerce data.

**Appendix A** - Table 1D: Deep Draft Navigation Projects, Navigation Cost Recovery Analysis by Segment, O&M Expenditures for FY 1996 (**Actual**).

**Appendix B** - Table 21S: Shallow Draft Navigation Projects Not Subject to the Inland Waterway Fuel Tax, Navigation Cost Recovery Analysis by Segment, O&M Expenditures for FY 1996 (**Actual**).

**Appendix C** - Table 11S: Shallow Draft Navigation Projects Subject to the Inland Waterway Fuel Tax, Analysis by Waterway Segment, O&M Expenditures for FY 1996 (**Actual**).

**Appendix D** - Table 1D: Deep Draft Navigation Projects, Navigation Cost Recovery Analysis by State, O&M Expenditures for FY 1996 (**Actual**).

**Appendix E** - Table 21S: Shallow Draft Navigation Projects Not Subject to the Inland Waterway Fuel Tax, Navigation Cost Recovery Analysis by State, O&M Expenditures for FY 1996 (**Actual**).

**Appendix F** - Table 1D: Deep Draft Navigation Projects, Navigation Cost Recovery Analysis by Segment, O&M Expenditures for FY 1996 (**Estimated - President's Budget**).

**Appendix G** - Table 21S: Shallow Draft Navigation Projects Not Subject to the Inland Waterway Fuel Tax, Navigation Cost Recovery Analysis by Segment, O&M Expenditures for FY 1996 (**Estimated - President's Budget**).

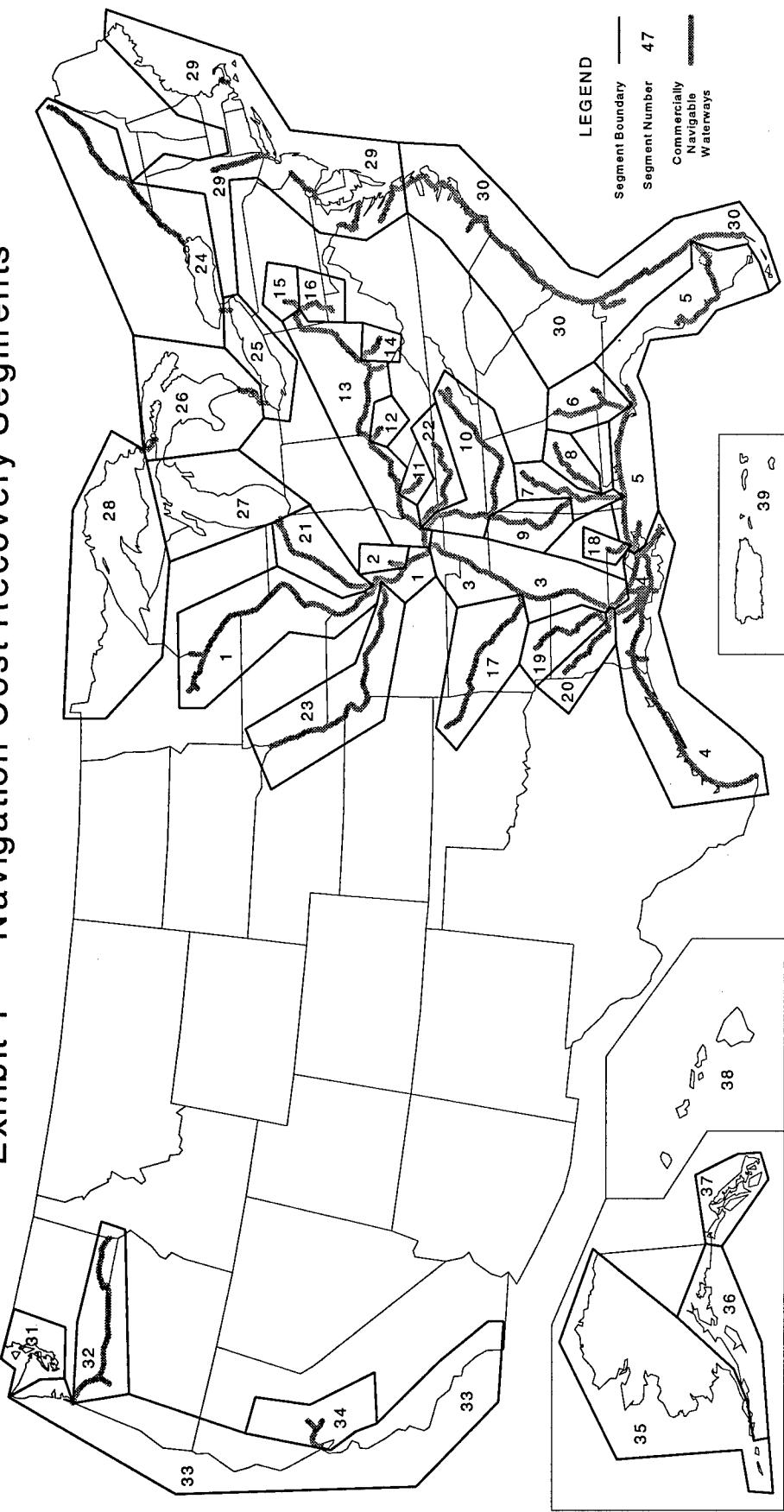
**Appendix H** - Table 11S: Shallow Draft Navigation Projects Subject to the Inland Waterway Fuel Tax, Analysis by Waterway Segment, O&M Expenditures for FY 1996 (**Estimated - President's Budget**).

**Appendix I** - Deep Draft Navigation Projects Actual and Average O&M Expenditures, Waterborne Commerce and Average Annual Tonnages, Annual O&M Costs per Ton of Commerce.

**Appendix J** - Shallow Draft Navigation Projects Not Subject to the Inland Waterway Fuel Tax, Actual and Average O&M Expenditures, Waterborne Commerce and Average Annual Tonnages, Annual O&M Costs per Ton of Commerce.

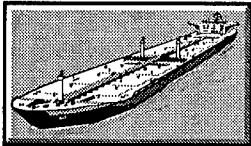
**Appendix K** -Shallow Draft Navigation Projects Subject to the Inland Waterway Fuel Tax, Analysis by Segment, O&M Expenditures, Average ton-Miles per year, Annual O&M Cost per Ton-Miles per year.

**Exhibit 1 - Navigation Cost Recovery Segments**



**Exhibit 1 (Continued)**  
**Navigation Segment Listing**

<u>Segment</u>	<u>Name</u>	<u>Segment</u>	<u>Name</u>
1	Upper Mississippi River	21	Illinois Waterway
2	Kaskaskia River	22	Cumberland River
3	Lower Mississippi River	23	Missouri River
4	West Gulf (GIWW-West)	24	Lake Ontario
5	East Gulf (GIWW-East)	25	Lake Erie
6	Apalachicola, Chattahoochee, & Flint Rivers	26	Lake Huron
7	Black Warrior River	27	Lake Michigan
8	Alabama-Coosa Rivers	28	Lake Superior
9	Tennessee-Tombigbee River	29	North Atlantic Coast
10	Tennessee River	30	South Atlantic Coast
11	Green and Barren Rivers	31	Puget Sound
12	Kentucky River	32	Columbia River System (Columbia Snake River)
13	Ohio River	33	West Coast
14	Kanawha River	34	San Francisco Bay Area (Sacramento)
15	Allegheny River	35	North Alaska
16	Monongahela River	36	Central Alaska
17	Arkansas and White River	37	Southeastern Alaska (Juneau, AK)
18	Pearl River	38	Hawaiian Islands
19	Ouachita and Black River	39	Caribbean
20	Red River	40	Other Pacific



## Navigation Operation and Maintenance: Expenditures for Harbors and Waterways Fiscal Year 1996

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### CHAPTER I - INTRODUCTION

#### 1.1 Background

The Navigation Cost Recovery Database System (NCRDBS) was developed by the Headquarters, U.S. Army Corps of Engineers (HQUSACE) Civil Works Office of Policy for the purpose of analyzing proposed navigation cost recovery legislation. The data base was initially established early in 1981 in conjunction with legislation proposed in Administration supported bills: S. 809 and H.R. 2959 for deep-draft projects and S. 810 and H.R. 2962 for shallow draft projects. These bills defined the scope of cost recovery to focus on projects which are for commercial navigation purposes.

The NCRDBS currently contains operation and maintenance expenditures dating from Fiscal Year (FY) 1977 for all Corps projects with commercial navigation as an authorized purpose. The database is updated annually on a fiscal year basis over a cycle of three increments:

(a) **“Preliminary” O&M cost estimates** are developed for the next budget year based on the Corps initial submission to the Office of Management and Budget (OMB);

(b) **“Actual” O&M expenditures** are compiled for the prior fiscal year; and,

(c) **“Final” O&M estimated costs** are documented for the next fiscal year in connection with the annual release of the President’s budget request (these estimates replace the preliminary O&M estimates described above).

As an example of this annual cycle, the latest update began with IWR’s development of the “preliminary” FY 1998 estimates in the fall of 1996. This estimate was based on the Corps initial submission of its FY 1998 budget request to OMB. Next, in the first quarter of FY 1997, when the “actual” O&M expenditures for FY 1996 were available, IWR completed the FY 1996 O&M “actual” report (these are the expenditures documented herein). Finally, upon release of the President’s FY 1998 budget, the “final” estimated O&M costs for FY 1998 will be compiled to replace the “preliminary” estimates within the NCRDBS.

Ultimately, the final estimated and actual O&M expenditures for a given fiscal year are documented together in NCRDBS reports for that year. Thus, this report contains tables displaying the final estimates based on the FY 1996 President’s budget (Appendices F, G, and H) along with the actual navigation O&M expenditures for FY 1996 (Appendices A-E).

## **1.2 Sources of Funds**

All Corps O&M expenditures are authorized and appropriated by Congressional action. The three categories of appropriations of interest to the NCRDBS are as follows (prefixed by the Corps funding citations):

- o 96x3123 Operations and Maintenance, General
- o 96x3112 Flood Control, Mississippi River and Tributaries
- o 96x5125 Maintenance and Operation of Dams & Other Improvements of Navigable Waters

Most NCRDBS costs (approximately 90 percent) are funded under the 96x3123 appropriations category. This category funds navigation projects in coastal and Great Lakes waters and inland waterways. The NCRDBS routinely segregates the O&M expenditures into three components:

- o *Deep draft projects* subject to cost recovery from the Harbor Maintenance Trust Fund ;
- o *Shallow draft projects* subject to the inland waterway fuel tax; and,
- o *Shallow draft projects* not subject to the fuel tax.

The traditional distinction between shallow and deep draft waterway and channel projects is *fourteen feet*. Projects which have a depth of *fourteen feet or less* are considered *shallow draft*; those *greater than fourteen feet* are considered *deep draft*. An exception to the depth definition is for a project with an authorized depth greater than fourteen feet, but only at the open water entrance channel for access to a channel of fourteen feet or less. Such a project is treated as a shallow draft project.

## **1.3 Navigation Cost Recovery Database Reports**

The NCRDBS is a menu-driven, online query/update and report system. It generates a series of three reports which correspond to the navigation project categories described in Section 1.3 above. The O&M cost report for the deep draft category of projects is known as Table 1D, while O&M costs for the shallow draft project categories are displayed in tables designated as 11S and 21S, for fuel tax and non-fuel tax projects, respectively.

*Both the 1D table for deep draft projects and the 21S table for shallow draft projects not subject to the fuel tax are used for cost recovery purposes.* These tables encompass those Corps projects whose maintenance costs are initially funded by Federal general revenues and reimbursed by the Harbor Maintenance Trust Fund (HMTF). The Harbor Maintenance Tax (HMT) was authorized under Sections 1401 and 1402 of the Water Resources Development Act

(WRDA) of 1986, Public Law 99-662. This law imposed a fee on the value of commercial cargo loaded (export and domestic) or unloaded (imports) and the ticket price of passenger vessels at ports which have had federal expenditures for construction, operation or maintenance made on their behalf since 1977. As amended, the law now recovers 100 percent of the O&M expenditures made by the Corps of Engineers at Federally maintained channels and harbors at maritime, Great Lakes and inland ports.

In 1988 the Executive Branch determined that collection of the HMT would be administratively and economically prohibitive at the shallow draft ports and harbors (coastal and inland) subject to the tax because of the exemptions in the law, and the low levels of taxable cargo at these areas. *Collection of the HMT is currently limited to deep draft ports having navigation expenditures since 1977.* Therefore, the O&M expenditures for the shallow draft projects appearing on Table 21S, although reimbursed by the Harbor Maintenance Trust Fund, are not directly recovered from collection of the tax at these shallow draft harbors at this time.

Cargo shipped on waterways subject to the Inland Waterways Fuel Tax (Public Law 95-502) is not subject to the HMT. The Corps operation and maintenance expenditures for projects on the fuel tax system (Table 11S) are not paid from the HMTF; instead, these O&M expenditures are appropriated from Federal general revenues. Note that revenue generated from the Inland Waterways Fuel tax is used to pay for 50 percent of the *capital (new construction and major rehabilitation)* costs on the fuel tax system, and is not used to recover O&M expenditures on the system.

Each of the three NCRDBS reports (i.e., Tables 1D, 11S, and 21S) presents navigation project O&M costs organized by waterway segment (Appendices A-C). Exhibit 1 presents a map depicting the location of the 40 segments used by the Corps. Projects within each segment are listed numerically by assigned Corps of Engineers “Project Work Identification” (PWI) code (formerly known as the project CWIS number). In addition, the deep draft and non-fuel tax shallow draft projects (Tables 1D and 21S, respectively) are also presented in an alternate format with projects organized alphabetically within each state (Appendices D and E and Chapter II - Analysis of FY 1996 Results).

#### **1.4 Costs Included in the Navigation Cost Recovery Database System**

The NCRDBS contains project total, navigation, other, and joint operation and maintenance expenditures on a yearly (fiscal year) basis for all Civil Works projects authorized solely or in part (i.e., multi-purpose projects) for navigation purposes. *Navigation expenditures are defined as those navigation O&M costs incurred by the Corps of Engineers on water resources projects which have navigation as an authorized purpose.* Projects authorized for navigation may include *recreational boating, fishing, harbors of refuge, and for some inland waterway projects, multi-purpose flood control, water supply and/or hydro-power.* Non-navigation costs attributed to these purposes are not recovered for the HTMF.

The accounts specified within the NCRDBS are for navigation, other (including recreation), and joint use costs. Historically, the bulk of the O&M cost data has been derived from the Corps wide financial database known as the Corps of Engineers Management Information System (COEMIS). The COEMIS system is accessed electronically by IWR to extract the navigation O&M cost accounts relevant to the NCRDBS. Note that the COEMIS system is being replaced by the new Corps of Engineers Financial Management System (CEFMS) as Corps offices are brought online to the new system. Additional cost data on approximately 90 multiple purpose projects and navigation projects which include recreation is obtained from an annual survey of Corps' Division and District Construction-Operations offices.

The NCRDBS consists of a series of electronic files (dBASE III tables) which include all Corps navigation projects for which O&M costs are expended within a given fiscal year. Separate files exist for each fiscal year from 1977 through 1996. The costs are displayed as the *actual dollars* spent that year for each project and as a total amount. IWR separately maintains the database in *constant dollars* (currently expressed as *1996 dollars*), and also has calculated the average yearly O&M for each project over the entire 1977-1994 period (also in *1996 dollars*).

## **1.5 O&M Cost Allocation**

Most of the projects for which O&M costs appear in the NCRDBS are authorized as single purpose navigation projects. However, some of the projects with navigation expenditures are multiple purpose projects which include other authorized water resources functions in addition to navigation. Total O&M costs for a particular project may be divided into specific costs and joint costs:

*o Specific costs are those costs which are unique to a single purpose* (i.e., costs associated with locks are specific to navigation, those costs attributed to powerhouse operation are specific to hydropower production, etc.).

*o Joint costs are those associated with more than one project purpose* (i.e., costs for the operation of a dam spillway would be a joint cost for a multiple-purpose reservoir project).

When all specific costs are added together and subtracted from total costs, the remainder is the joint cost. Reasonable and established cost allocation procedures are applied to allocate joint costs to specific project purposes. This allocation is especially important for multipurpose projects because, for example, water supply and hydroelectric power are vendible project outputs involving costs which are reimbursable to the Federal government.

Different administrative procedures are used to allocate joint costs and to arrive at total navigation costs for four types of projects in the NCRDBS. The first type involves *single purpose navigation projects* for which costs attributable to commercial navigation are obtained simply by subtracting recreational specific costs from the total project costs. Costs that would be considered joint costs not directly attributable to navigation in multiple purpose projects are attributed entirely to navigation in single purpose navigation projects. Over 90 percent of the total

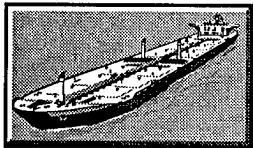
navigation O&M costs applies to single purpose projects, including about 80 percent of the shallow draft fuel tax project total.

The second type of project is multiple purpose projects that have an established *administrative cost allocation* for reimbursable purposes. These projects have had their cost allocation determined administratively at the time of project completion. The principal technique used is the *Separable Costs-Remaining Benefits (SCRB) Method* and involves allocating both separable costs and remaining joint costs for each specific project purpose such as navigation, flood damage reduction, recreation hydropower, fish and wildlife, etc. At the end of each fiscal year all Corps districts are surveyed to identify the specific costs allocated to navigation and other purposes based on these allocation percentages. Ultimately, navigation costs include costs specific to navigation and those joint use costs allocated to navigation based on the latest official cost allocation formula. Approximately six percent of the 11S projects fall into this category.

*Multiple purpose projects without administrative allocation* are a third category representing only about one percent of total navigation costs. Under the current *O&M Feature Cost Code (FCC)* definition, certain *FCCs* are attributed specifically to navigation in the NCRDBS tables (i.e., for the Table 11S cost data, four *FCCs* - 601.1 Operation of Locks; 622 Lock Maintenance; 626 Breakwater, Jetty and Seawall Maintenance; and, 633 Channel and Canal Maintenance are designated as navigation cost accounts). There are eight *FCCs* attributed specifically for other project purposes (e.g., 604 Operation of Power Plants, 605 Natural Resources Management, and 629 Maintenance of Recreation Facilities, etc.). Joint costs are computed as the total O&M costs minus the costs for the navigation and other accounts. Ten percent of joint costs is added to the sum of the costs for the four navigation *FCC's* to arrive at the total costs attributable to navigation. The ten percent is merely an "engineering estimate" to recognize the contribution the joint cost makes toward navigation.

The fourth type of project, the *Mississippi River and Tributaries (MR&T)* component of the inland waterway system, is also *without an administrative allocation*. It is treated like type three above, except that 33 percent of joint costs is allocated to navigation. MR&T projects account for nearly 13 percent of the 11S navigation O&M costs. The Mississippi River and Tributaries project provides for flood protection of the alluvial valley of the Mississippi River and its tributaries between Cape Girardeau, Missouri, above the junction with the Ohio River and the Head of Passes, Louisiana. It also provides for a shallow draft navigation channel from Cairo, Illinois, at the junction with the Ohio River to Baton Rouge.

Note that a new O&M cost breakdown (now designated as *Work Category Codes (WCCs)*) based on Corps of Engineers business functions is expected to simplify and increase the consistency of the above allocation procedures. The new *WCCs* are planned for use in the execution of the FY 1998 budget and in the formulation of all budgets thereafter. The cost allocation approach for navigation O&M cost recovery described above will generally be followed under the new procedure.



## Navigation Operation and Maintenance: Expenditures for Harbors and Waterways Fiscal Year 1996

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### CHAPTER II - ANALYSIS OF FY 1996 RESULTS

#### **2.1 Introduction**

This chapter consists of a summary and analysis of the Corps actual FY 1996 navigation O&M expenditures. The FY 1996 results are presented as O&M expenditure totals by navigation category (deep draft, shallow draft, and inland waterways), and are compared with the average navigation O&M spending over the previous five years and displayed against the President's Budget estimate for FY 1996 (Table II-1).

FY 1996 navigation costs are also discussed within the context of the NCRDBS historical record dating back to FY 1977. The historical record is presented in both actual and constant (1996) dollars, resulting in quite different trends, as would be expected. These trends are displayed in both tabular and graphical forms (Tables II-2 and II-3, and Figures II-1 and II-2). FY 1996 cost recovery data and historical trends are presented for deep and shallow draft (non-fuel tax) harbors whose O&M is subject to recovery from the HMTF. Included in this analysis is data on the number of harbor projects maintained each year, and the average O&M cost/harbor project for FY 1977-1996 (Table II-4).

Finally, actual O&M expenditures for FY 1991-1996 are presented for the ten highest cost projects (or waterways) within each navigation category, and the ten states with the highest FY 1991-1996 O&M cost recovery amounts (Tables II-5 thru II-8).

The following paragraphs summarize the FY 1996 results. For more specific information on individual projects, refer to the FY 1996 O&M cost reports for the 1D, 21S and 11S navigation categories included within Appendices A-H.

#### **2.2 Summary of FY 1996 Navigation O&M Expenditures**

In FY 1996 total navigation O&M expenditures for waterways and harbors reached a record \$1,012 million, of which \$536 million or 53 percent was for harbors and \$476 million or 47 percent was for waterways and (Table II-1 and Appendices A-C). The FY 1996 total represented a four percent increase over FY 1995 and a one percent increase from FY 1994 in actual dollars. However, this net increase in actual spending can be traced to the growth in O&M expenditures for deep and shallow draft (non-fuel tax) harbors, which mask a retreat from the record totals of inland waterways O&M posted in FY 1994-1995. Waterway costs declined by \$11 million in FY 1996 compared to the average for the two previous years, but were well above the \$411 million average for FY 1991-1993, or the \$441 million average for FY 1991-1995 (Table II-1).

**TABLE II-1**  
**NAVIGATION O&M EXPENDITURES\***  
**FOR HARBORS AND WATERWAYS**  
**FY 1991-96 (\$1,000)**

NAVIGATION CATEGORY	ACTUALS			AVG. 1991-93	PRES. BUDGET EST. 1996	ACTUAL 1996
	1991	1992	1993	1994	1995	
HARBORS						
DEEP	393,946	378,307	415,667	436,277	418,893	395,973
SHALLOW	68,284	59,675	61,223	82,920	63,234	63,060
SUBTOTAL	462,229	437,981	476,890	519,196	482,126	459,034
WATERWAYS	381,924	453,765	396,923	481,563	489,745	410,871
TOTAL	844,154	891,746	873,814	1,000,759	971,871	869,904

SOURCE: Navigation Cost Recovery Data Base System (NCRDBS), USACE, Institute for Water Resources

\* Costs include construction costs for dikes and revetments in the Mississippi River and Tributaries (MR&T) account, where such work is comparable to similar work funded by O&M. In FY 1996 MR&T dike and revetment navigation recoverable costs totaled \$23,081,500.

The four percent increase in FY 1996's total navigation O&M expenditures compared to FY 1995 is due to a ten percent increase in deep draft navigation costs and a 17.7 percent increase in shallow draft harbor expenditures. At the same time navigation O&M spending on the inland waterways fell by almost three percent. The deep draft navigation O&M actuals for FY 1996 (\$461.7 million) represents the highest amount recorded for this category, while the \$74.4 million expended on O&M for shallow draft harbors stands third to the spending totals of FY 1994 (\$82.9 million) and FY 1988 (\$77.3 million).

Total navigation O&M expenditures averaged 14 percent higher for the FY 1994-1996 years compared with the FY 1991-1993 years. This increase reflects a boost in costs for the waterways in FY 1994 and 1995 after the Great Flood of 1993, in combination with increases of \$21 million for both deep and shallow draft harbors in FY 1994, and a \$25 million jump in deep draft costs in FY 1996.

Consequently, total navigation O & M costs (actual dollars) topped \$1 billion for the first time in FY 1994, and again surpassed the billion dollar level in FY 1996 for a new record. After FY 1991 and 1992, when costs averaged \$386 million, deep draft projects costs have risen from \$416 to \$462 million. Shallow draft project costs have varied considerably from \$60 to \$83 million.

FY 1996 actual total navigation costs were about \$27 million below the estimate in the President's Budget Request of \$1,039 million as all three project categories shared in the cost savings. Waterways were below estimate by \$16 million, deep draft harbors by \$2 million, and shallow draft harbors by over \$9 million. See paragraphs 2.3, 2.4 and 2.6 below for additional discussions of these cost savings. Appendices F-H include the 1D, 21S and 11S project listings for the FY 1996 President's Budget estimate.

## 2.2.1 Historical Trends

Table II-2 and Figure II-1 present the Corps actual navigation O&M expenditures for the complete twenty year record of the NCRDBS (FY 1977-1996). In actual dollars overall navigation O&M expenditures have steadily grown since FY 1977 (up by 134 percent), with deep draft costs increasing by 115 percent, shallow draft harbor expenditures growing by 140 percent, and inland waterways O&M spending up by 154 percent. Within this overall growth there has been a gradual shift of the relative spending share from deep draft harbors to inland waterways. Navigation O&M outlays for deep draft harbors exceeded those for inland waterways O&M for every year between 1977 and 1985. However, since 1985, O&M spending on the inland waterways has exceeded that for deep draft harbor projects for all but one year (1993).

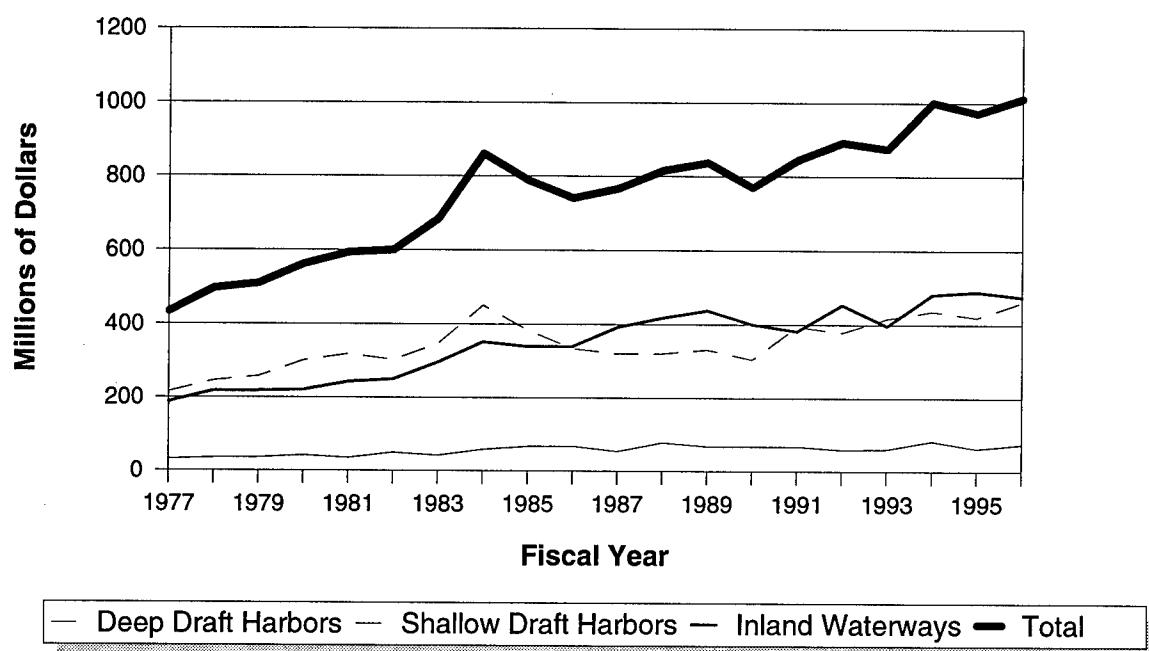
This shift has resulted in the share of navigation O&M spending on deep draft harbors declining relative to overall navigation O&M during the period of analysis. O&M spending on deep draft harbors was near or above 50 percent of the navigation total from FY 1977 through 1985, but has since declined to shares generally about 45 percent, but as low as 39 percent. In fact, the average deep draft O&M cost for the ten year period FY 1977-1986 is \$315 million,

**TABLE II-2**  
**TOTAL NAVIGATION O&M EXPENDITURES BY CATEGORY**  
**1977-1996 (ACTUAL DOLLARS)**

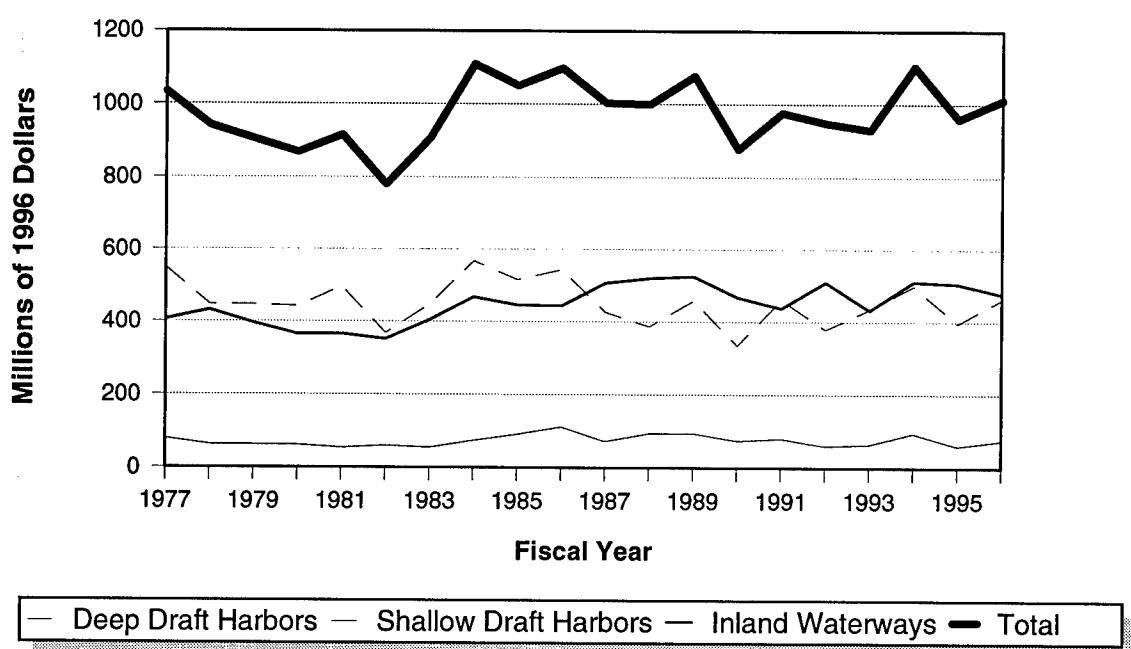
FISCAL YEAR	TOTAL DEEP DRAFT O&M EXPENDITURES (FROM TABLE 1D)		TOTAL SHALLOW DRAFT O&M EXPENDITURES (NONFUEL TAX, FROM TABLE 2S)		TOTAL INLAND WATERWAY O&M EXPENDITURES (FUEL TAX, FROM TABLE 1S)		TOTAL NAVIGATION O&M COSTS	
	ACTUAL (\$000)	% OF TOTAL	ACTUAL (\$000)	% OF TOTAL	ACTUAL (\$000)	% OF TOTAL	ACTUAL (\$000)	% OF TOTAL
1977	214,669	50%	30,925	7%	187,709	43%	433,304	
1978	244,818	49%	34,435	7%	217,157	44%	496,410	
1979	256,703	50%	36,110	7%	217,172	43%	509,985	
1980	300,181	53%	41,760	7%	219,900	39%	561,841	
1981	317,228	53%	34,492	6%	241,769	41%	593,489	
1982	301,493	50%	49,237	8%	248,785	41%	599,514	
1983	346,854	51%	42,019	6%	295,803	43%	684,476	
1984	450,755	52%	58,636	7%	350,567	41%	859,958	
1985	382,140	49%	67,261	9%	338,429	43%	787,830	
1986	333,202	45%	68,287	9%	339,301	46%	740,789	
1987	319,507	42%	53,944	7%	392,440	51%	765,950	
1988	320,291	39%	77,311	9%	417,875	51%	815,476	
1989	330,742	40%	68,200	8%	437,731	52%	836,673	
1990	303,185	39%	67,259	9%	399,505	52%	769,949	
1991	393,946	47%	68,284	8%	381,924	45%	844,154	
1992	378,307	42%	59,675	7%	453,765	51%	891,746	
1993	415,667	48%	61,223	7%	396,923	45%	873,814	
1994	436,277	44%	82,920	8%	481,563	48%	1,000,759	
1995	418,893	43%	63,234	7%	489,745	50%	971,871	
1996	461,722	46%	74,264	7%	475,960	47%	1,011,946	
<b>AVERAGES</b>								
1977-95	346,324	47%	56,974	8%	349,201	46%	752,499	
1977-85	314,784	50%	46,316	7%	265,659	42%	626,760	
1987-95	377,864	43%	67,631	8%	432,743	49%	878,238	
1991-95	417,468	45%	68,266	7%	446,647	48%	932,381	

SOURCE: Navigation Cost Recovery Data Base System (NCRDBS) Reports, FY 1977-1996, USACE, Institute for Water Resources

**Figure II-1**  
**Corps of Engineers Navigation O&M Expenditures**  
**(Actual \$'s) - Historical**



**Figure II-2**  
**Corps of Engineers Navigation O&M Expenditures**  
**(Constant 1996 \$'s) - Historical**



or 50 percent of the navigation total, while the relative share of the deep draft average annual amount over the last ten years (\$378 million) has declined to 43 percent of the total. The deep draft navigation O&M share of 46 percent for FY 1996 is typical for the period 1991-1995 (average of 45 percent of total navigation O&M).

Inland waterways O&M expenditures for the FY 1977-1986 period averaged \$266 million or 42 percent of the navigation total, while the average for the last ten years (\$433 million for FY 1987-1996) has resulted in an increased share of 49 percent of the total. In FY 1987 to 1990 waterways accounted for 51 or 52 percent of navigation O & M costs. During this period waterway costs hit a peak of \$438 million in FY 1989, or over \$140 higher than the \$296 million just six years earlier in 1983.

The higher costs of waterways for the last ten years and their greater relative share of navigation O & M expenditures can be partially attributed to major rehabilitation, major maintenance, and new waterway projects. A comparison of costs for specific waterways in 1983 and 1989 shows there were six waterways with increases of greater than \$10 million and five with increases of \$3 to \$8 million. For the Upper Mississippi, Ohio, and Illinois major rehabilitation comprised one-half or more of the cost increase. Starting in FY 1993 new major rehabilitation projects were funded under the Construction General appropriation, and the overall cost of continuing major rehabilitation funded under O & M began to decline as projects were completed.

The completion of new waterway projects has contributed to the growth of inland navigation O&M costs. In FY 1989 navigation O&M costs for the Tennessee - Tombigbee Waterway cost \$13.7 million more than in 1983 and costs for the Red River Waterway had increased by \$3.1 million over the same period. By FY 1996 the navigation O & M costs for the two new projects totaled almost \$23 million.

Major maintenance costs on the waterways, which began to rise substantially after 1985, especially on the Upper Mississippi and Illinois, are a reflection of aging facilities. By the year 2000 about 40 percent of inland waterway lock chambers will have exceeded their 50 year design lives, including many heavily used locks on the Upper Mississippi and Illinois Rivers. Major maintenance costs are expected to reach a fifteen year total of about \$500 million by the year 2000.

Major maintenance in FY 1996 was defined as a non-repetitive item of maintenance or aggregate items of related work in which the total estimated cost exceeded \$3 million. The work would make the project feature effective for its desired purpose and would not qualify as major rehabilitation.

Shallow draft harbor navigation O&M costs have generally remained constant around 7-8% through the overall twenty year period, while inland waterway O&M attributed to navigation rose from shares around 40 percent (1977-1985) to expenditure totals approaching or exceeding 50 percent (Table II-2).

## **2.2.2 Navigation O&M Costs: Real Spending**

When O&M expenditures over the period of analysis are examined in constant (1996) dollars, quite a different picture emerges. As can be seen from Table II-3, the FY 1996 overall total of \$1,012 million was only four percent above the average navigation O&M spending throughout the FY 1977-1996 period and, in fact, has been exceeded by spending in six other fiscal years.

In 1996 dollars overall navigation O&M spending has averaged \$974 million over the period of record, during which the \$1 billion spending level has been exceeded eight times. The highest annual constant dollar expenditure total was \$1.108 billion in 1984. The spending trend over the last ten years has essentially been flat, with the annual averages for FY 1987-1996 and FY 1991-1996 both being \$988 million. In real terms the FY 1996 total is approximately equal to the FY 1977 total (\$1.033 billion), with the major difference being the shift in relative spending from deep draft O&M to O&M for inland waterways, as discussed in section 2.2.1

## **2.2.3 Navigation Cost Recovery**

Navigation O&M expenditures for deep draft (1D Report) and shallow draft (21S Report for non-fuel tax system) harbors are subject to recovery form the Harbor Maintenance Trust Fund. The FY 1996 1D and 21S Cost Recovery Tables are included in their entirety as Appendices A and B, respectively. Table II-4 presents an historical summary of these costs along with a count of the number of deep and shallow draft projects maintained each year FY 1977-1996. The yearly average annual O&M cost per deep and shallow draft project is also tabulated in Table II-4 (in actual dollars) and displayed on Figures II-3 and II-4 (in actual and constant dollars, respectively).

In FY 1996 the navigation O&M costs subject to recovery from the HMTF reached a record \$536 million, up by 11 percent from FY 1995. This increase continues the general trend of growth reflected over the last ten years, with the yearly average recoverable costs for the period FY 1991-1995 (\$475.7 million) representing a 22 percent increase over the \$388.4 million average during the previous five years (FY 1986-1990). This growth has been totally within the deep draft navigation category: O&M expenditures for deep draft harbors for the period FY 1991-1995 averages \$408.6 million, up 27 percent from the \$321.4 yearly average during FY 1986-1990. In contrast, the average annual shallow draft O&M expenditures has remained at approximately \$67 million over the last ten years.

In addition, the number of harbor projects maintained per year has also grown in recent years, particularly in FY 1995 and 1996. The FY 1996 total of 477 harbor projects maintained stands second to the record total of 535 projects for FY 1995 (Table II-4). This contrasts with the 385 average annual number of harbor projects maintained during the previous ten years. Over the twenty year period of record the growth in the number of projects being maintained has been primarily within the shallow draft navigation category. The average number of shallow draft projects maintained per year has risen by 30 percent when comparing the FY 1977-1986

**TABLE II-3**  
**TOTAL NAVIGATION O&M EXPENDITURES BY CATEGORY**  
**1977-1996 (CONSTANT 1996 DOLLARS)**

FISCAL YEAR	TOTAL DEEP DRAUGHT EXPENDITURES (BASED ON TABLE 10)		TOTAL SHALLOW DRAUGHT EXPENDITURES (NON-FUEL TAX, BASED ON TABLE 25)		TOTAL INLAND WATERWAY O&M EXPENDITURES (FUEL TAX, BASED ON TABLE 15)		TOTAL NAVIGATION O&M COSTS	
	1996 (\$'000)		% OF TOTAL		1996 (\$'000)		% OF TOTAL	
	1996 (\$'000)	% OF TOTAL	1996 (\$'000)	% OF TOTAL	1996 (\$'000)	% OF TOTAL	1996 (\$'000)	% OF TOTAL
1977	548,605	53%	79,044	8%	405,452	39%	1,033,191	
1978	447,037	47%	62,878	7%	431,274	46%	941,189	
1979	445,893	49%	62,724	7%	395,687	44%	904,304	
1980	441,566	51%	61,430	7%	365,034	42%	868,029	
1981	495,193	54%	53,842	6%	365,555	40%	914,550	
1982	367,821	47%	60,069	8%	351,284	45%	779,174	
1983	447,184	49%	54,205	6%	404,954	45%	906,343	
1984	567,500	51%	73,923	7%	466,955	42%	1,108,278	
1985	514,743	49%	90,588	9%	445,035	42%	1,050,365	
1986	542,786	49%	111,239	10%	443,806	40%	1,097,831	
1987	425,397	42%	71,800	7%	505,855	50%	1,003,051	
1988	386,591	39%	93,314	9%	519,836	52%	999,741	
1989	457,416	42%	94,320	9%	524,839	49%	1,076,576	
1990	325,019	38%	74,323	8%	467,021	53%	876,363	
1991	459,735	47%	79,587	8%	437,303	45%	976,725	
1992	319,063	40%	59,794	6%	509,124	54%	947,981	
1993	453,541	47%	63,856	7%	432,249	46%	929,646	
1994	498,228	45%	94,694	9%	510,456	46%	1,033,379	
1995	395,435	41%	59,893	6%	504,437	53%	959,564	
1996	461,722	46%	74,284	7%	475,960	47%	1,011,946	
<b>AVERAGES</b>								
1977-96	452,528	46%	73,779	8%	446,106	46%	974,413	
1977-95	461,842	50%	70,984	7%	407,503	43%	960,329	
1987-95	423,215	43%	76,575	8%	488,708	50%	988,497	
1987-96	437,954	44%	71,998	7%	478,255	48%	988,207	

SOURCE: Constant dollar amount are based on Navigation cost Recovery Data Base System (NCRDBS) Reports, FY 1997-1996, USACE, Institute for Water Resources application of Dredging Cost Per Yard (CPY) Index (for deep and shallow draft harbors) from CECW-OD's Continuing Analysis of Dredging Quantities and Costs for FY 1996, and Civil Works Construction Cost Index (for inland waterways) from EM-1110-2-1304).

period with the last ten years, as compared to an eight percent increase in average real costs per year.

A net result of this trend is that the average annual cost (in actual dollars) per deep draft project has averaged approximately \$2 million/project per year over the last decade, with the FY 1995 and 1996 amounts representing a decline from the peak average of \$2.35 million/project in 1993, Table II-4. The 1995 and 1996 average annual costs per shallow draft project (\$203 thousand and \$296 thousand, respectively) sharply declined (by 32 percent and 10 percent, respectively) from the \$331,700 average/harbor over the period FY 1985-1994. However, as shown in Figures II-3 and II-4, these trends in average annual cost per deep and shallow draft harbors are less evident when the costs are displayed in 1996 constant dollars. In real terms the average cost/project for both deep draft and shallow draft projects peaked in FY 1986.

### **2.3 Navigation O&M Expenditures for Deep Draft Harbors**

Expenditures for the ten highest cost deep draft harbors in FY 1996 amounted to \$162.6 million or about 35 percent of the total for all deep draft projects (Table II-5 and Appendix A). Their total was \$8.2 million higher than estimated in the President's budget as the cost for eight projects exceeded their estimate. This increase was offset by the Mississippi River, Baton Rouge to the Gulf, project, which was \$13.4 million below its estimated cost. Expenditures for the ten projects in FY 1996 exceeded their combined average annual cost for FY 1991-95 by \$6.8 million.

For the past six years expenditures on the ten highest cost deep draft projects have held steady while those for deep draft projects overall have risen. As a result, the most expensive projects' share of deep draft project costs declined from 43 to 35 percent. In three years (1992-1994) the cost of these top ten projects ranged from \$157 to \$164 million but recorded amounts of \$170 million in 1991 and then sharply dropped below \$130 million in 1995, primarily due to the decline in O&M costs for the Mississippi River-Baton Rouge to Gulf project.

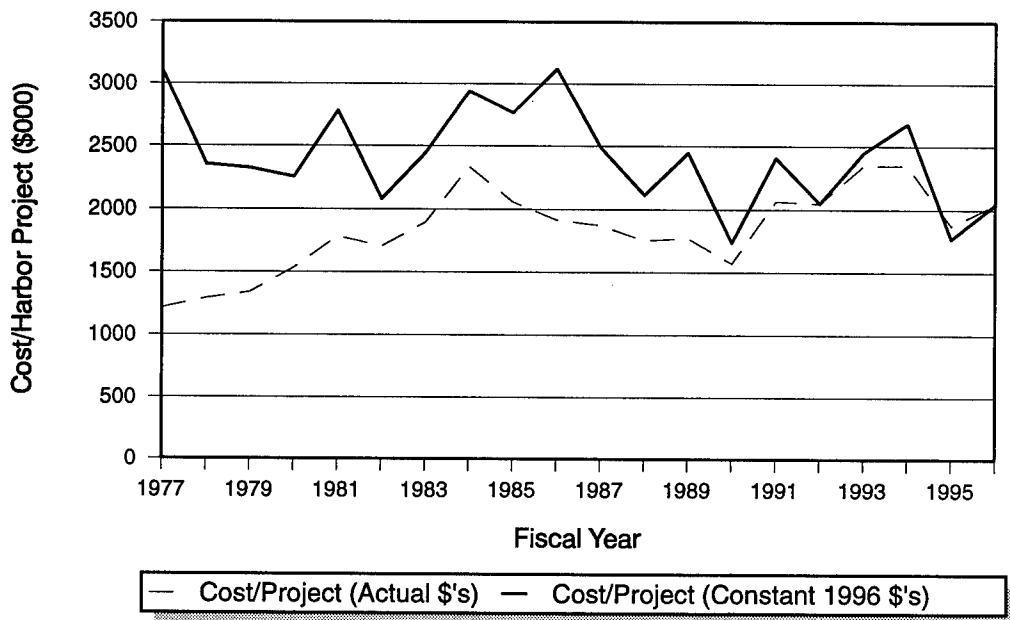
The location and physical characteristics of the top ten projects contribute to their higher costs. Six are affected by both coastal currents and riverine sedimentation. The St. Marys River project is not on the coast and the Mississippi River-Gulf Outlet project is not riverain, but both have the added expense of lock operation and maintenance. Costs for the Intracoastal Waterway from the Delaware River to Chesapeake Bay for FY 1991-93 include the costs for the waterway's rehabilitation and St. Georges Bridge at the project. Although the Columbia and Lower Willamette Rivers project is not on the coast and has no locks, large volumes of sediment are deposited over its approximately 115 mile length, despite the presence of dams upriver to catch some of the sediment.

**TABLE II-4**  
**NAVIGATION COST RECOVERY OF O&M EXPENDITURES**  
**DEEP DRAFT AND SHALLOW DRAFT HARBORS, 1977-1996**  
**ACTUAL DOLLARS**

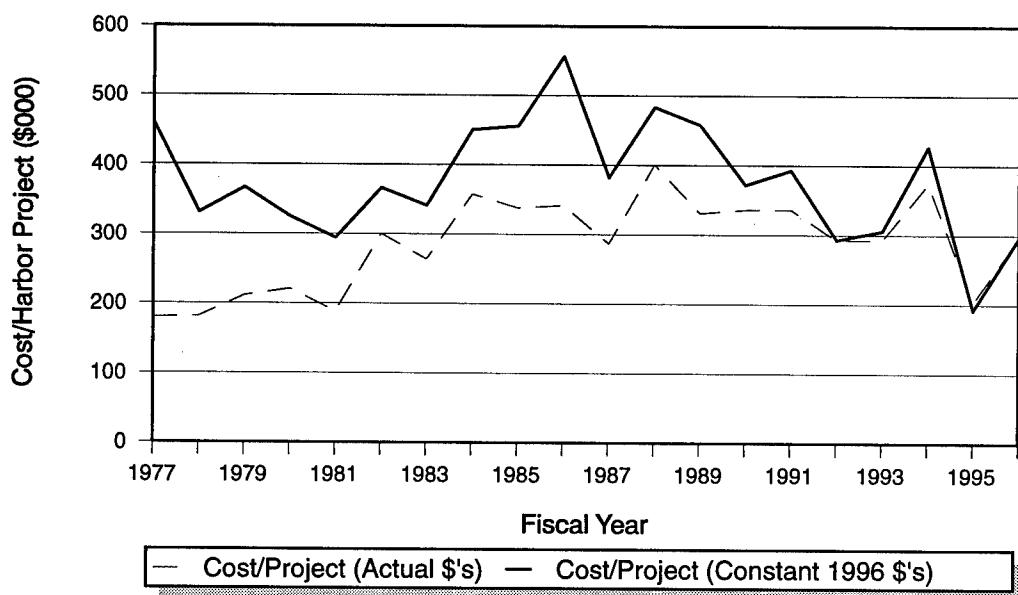
FISCAL YEAR	NO. OF DEEP DRAFT PROJECTS MAINTAINED	DEEP DRAFT O&M COSTS ACTUAL (\$'000)	AVERAGE COST PER PROJECT (\$'000)	NO. OF SHALLOW DRAFT PROJECTS MAINTAINED	SHALLOW DRAFT O&M COSTS ACTUAL (\$'000)	AVERAGE COST PER PROJECT (\$'000)		TOTAL O&M COSTS RECOVERABLE FROM HMF
						SHALLOW DRAFT O&M COSTS ACTUAL (\$'000)	AVERAGE COST PER PROJECT (\$'000)	
1977	177	214,669	1,213	172	30,925	179.80	245,594	
1978	190	244,818	1,289	190	34,435	181.24	279,253	
1979	192	256,703	1,337	171	36,110	211.17	292,814	
1980	196	300,181	1,532	189	41,750	220.95	341,941	
1981	178	317,228	1,782	183	34,492	188.48	351,720	
1982	177	301,493	1,703	164	49,237	300.22	350,729	
1983	183	346,654	1,894	159	42,019	264.27	388,673	
1984	193	450,755	2,326	164	58,636	357.54	509,391	
1985	186	382,140	2,055	199	67,251	337.95	449,391	
1986	174	333,202	1,915	200	68,287	341.43	401,488	
1987	171	319,607	1,869	188	53,944	286.94	373,551	
1988	183	320,291	1,750	193	77,311	400.57	397,602	
1989	187	330,742	1,769	206	68,200	331.07	398,942	
1990	193	303,185	1,571	200	67,259	336.30	370,444	
1991	191	393,946	2,063	203	68,284	336.37	462,229	
1992	185	378,307	2,045	204	59,675	292.52	437,981	
1993	177	415,667	2,348	209	61,223	292.93	476,890	
1994	186	436,277	2,346	222	82,920	373.51	519,196	
1995	224	418,893	1,870	311	63,234	203.32	482,126	
1996	226	461,722	2,043	251	74,264	295.87	535,986	
<b>AVERAGES</b>								
1977-96	188	346,324	1,836	199	56,973	287	403,297	
1977-86	185	314,784	1,705	179	46,315	258	361,100	
1987-96	192	377,964	1,967	219	67,631	315	445,495	
1991-96	198	417,468	2,119	233	68,266	299	485,735	

SOURCE: Navigation Cost Recovery Data Base System (NCRDBS) Reports, FY 1977-1996, USACE, Institute for Water Resources

**Figure II-3**  
**Navigation O&M Cost Per Project, Deep Draft Harbors,  
 1977-1996**



**Figure II-4**  
**Navigation O&M Cost Per Project, Shallow Draft Harbors,  
 1977-1996**



## **2.4 Navigation O&M Expenditures for Shallow Draft Harbors**

Navigation expenditures for the ten highest cost shallow draft harbors in FY 1996 amounted to \$19.0 million or about 26 percent of the total for all shallow draft harbor projects (see Table II-6 and Appendix B). Their total was \$4.0 million less than estimated in the President's budget mainly because the Manteo Bay and New Jersey Intracoastal Waterway projects were \$3.2 and \$1.2 million, respectively, below their estimates. The FY 1996 total navigation expenditures for the top ten were only \$0.3 million below their average for the previous five years as increases in costs for six projects offset the \$2.2 million decrease for Manteo Bay.

For the past six years expenditures on the ten highest cost shallow draft harbor projects have fluctuated in a small range between \$18.5 and \$20.4 million. Consequently, their share of all shallow draft harbor costs has dropped as costs for other projects rose. None of the projects showed a trend of rising or falling costs, although costs for the Trinity River were noticeably higher in FY 1993-95. Five projects displayed regular fluctuations in annual costs of less than \$1 million and another five projects varied by more than \$1 million per year. For four projects, including Manteo Bay, costs jumped even more in one or two years. Costs for Manteo Bay, the most expensive shallow draft harbor, were \$5.2 to \$6.1 million in three years, but peaked at \$8.2 million in FY 1991 and plummeted to \$2.1 and \$3.3 million respectively in FY 1994 and 1996.

While a project's location and physical characteristics play a role in its costs, only two (Freshwater Bayou and Rouge River Harbor at Gold Beach) obtain both coastal and riverine influences. Four others are affected by coastal currents and four by rivers. The added expense of lock and/or dam operations and maintenance is borne by three projects (Okeechobee Waterway, Fox River, and Freshwater Bayou).

## **2.5 Navigation O&M Expenditures for Deep and Shallow Draft Harbors by State**

In ten states the navigation O&M expenditures for harbor projects in FY 1996 exceeded \$20 million (see Table II- 7 and Appendices D and E). In Louisiana and Delaware the project costs were \$84 and \$55 million respectively. The costs in four states were \$30 to \$40 million and \$20 to \$30 million in four other states. The projects in the ten states cost a total of \$386 million or 72 percent of the \$586 million total for all deep and shallow draft harbor projects.

Geographically three states are on the Pacific Coast; three are on the Gulf Coast; Florida is on the Gulf and Atlantic Coasts; one is on the Atlantic Coast alone; New York is on the Atlantic Coast and Great Lakes; and Michigan is on the Great Lakes.

**TABLE II-5**  
**NAVIGATION COST RECOVERY OF O&M COSTS**  
**FOR TEN HIGHEST COST DEEP DRAFT PROJECTS**  
**FY 1991-96 (\$1,000)**

ITEM	PROJECT NAME	FY 1991			FY 1992			FY 1993			FY 1994			FY 1995			FY 1996		
		ACT	EST	%	ACT	EST	%	ACT	EST	%	ACT	EST	%	ACT	EST	%	ACT	EST	%
68	MISS RIVER-BATON ROUGE TO GULF, LA	47,728	36,817	42,803	60,840	43,745	46,386	51,837	51,837	38,461									
8160	IWW FM DEL R TO CHPKE BAY	20,573	22,526	26,069	11,842	12,102	18,622	16,090	17,691										
11670	MOBILE HBR, AL	21,687	20,425	14,446	15,987	17,358	17,980	17,780	20,344										
4570	DEL RVR&PA NJ PHILA TO SEA	14,365	15,404	14,442	12,638	11,649	13,700	18,157	20,586										
11410	MISS R-GULF OUTLET, LA	9,417	11,720	13,591	12,026	9,025	11,156	12,054	17,004										
17380	ST MARYS RIVER, MI	8,090	9,300	10,810	11,610	13,096	10,581	9,505	11,753										
3630	COLUMBIA & LWR WLMTE RVR, OR	10,589	10,889	9,245	10,350	11,475	10,510	11,017	17,042										
870	*BALT HBR CHS, MD & VA	14,251	16,688	13,600	4,266	792	9,919	N/A	2,541										
15780	SABINE-NECHEES WW, TX	14,305	5,894	7,282	12,544	3,426	8,690	11,946	17,118										
12490	NEW YORK HARBOR, NY & NJ	9,421	8,857	11,842	4,705	6,677	8,300	6,020	65										
	<b>SUB TOTAL: TEN HIGHEST</b>	<b>170,426</b>	<b>158,520</b>	<b>164,130</b>	<b>156,806</b>	<b>129,344</b>	<b>155,845</b>	<b>154,406</b>	<b>162,606</b>										
	<b>TOTAL: ALL DEEP DRAFT</b>	<b>393,946</b>	<b>378,307</b>	<b>415,667</b>	<b>436,277</b>	<b>418,893</b>	<b>408,618</b>	<b>463,693</b>	<b>461,722</b>										
	<b>TEN HIGHEST SHARE OF TOTAL</b>	<b>43%</b>	<b>42%</b>	<b>39%</b>	<b>36%</b>	<b>31%</b>	<b>38%</b>	<b>33%</b>	<b>35%</b>										

\* Estimated cost not available, but may have been included in estimate for Baltimore Harbor & 50FT Channel, which was \$13,425,000.00. Actual cost for the latter project was \$8,776,740.00

SOURCE: Navigation Cost Recovery Data Base System (NCRDBS) Reports, FY 1977-1996, USACE, Institute for Water Resources

**TABLE II-6**  
**NAVIGATION COST RECOVERY OF O&M COSTS**  
**FOR TEN HIGHEST COST SHALLOW DRAFT PROJECTS**  
**FY 1991-96 (\$1,000)**

PWN	PROJECT NAME	1991	1992	1993	1994	1995	1996	Ave.	EST
		1991	1992	1993	1994	1995	1996	1996	1996
10580	MANTEO BAY, NC	8,210.3	6,100.4	6,014.0	2,063.4	5,171.3	5,511.9	6,506.0	3,309.6
13240	OKEECHOBEE WWY, FL	1,715.0	2,974.9	1,925.0	4,983.7	2,235.5	2,766.8	3,326.0	3,629.0
8190	NEW JERSEY IWW, NJ	2,448.4	3,214.0	1,792.0	2,358.8	2,829.6	2,528.6	3,729.0	2,507.4
6610	FOX RIVER, WI	1,708.1	1,681.0	2,199.0	1,792.9	2,271.6	1,930.5	2,215.0	2,117.3
6200	FRESHWATER BAYOU, LA	1,964.5	1,039.9	880.0	1,989.8	1,631.9	1,501.2	1,659.0	1,664.4
19550	IWW COAST OF VA, VA	921.8	1,218.3	1,341.0	1,157.0	955.9	1,118.8	1,268.0	1,371.6
99981	MR&T-MCKELLER LK HBR, TN	1,239.0	840.0	1,540.0	1,595.0	289.0	1,100.6	1,415.0	1,930.0
18510	TRINITY RIVER, TX	639.1	487.9	1,060.0	1,648.7	1,167.7	1,000.7	1,270.0	701.7
15600	ROGUE RVR HBR GOLD BH, OR	1,050.0	929.6	828.0	1,063.2	1,031.8	980.5	816.0	998.2
76106	CHINCOTEAGUE INLET, VA	457.4	1,412.6	945.0	663.7	958.2	887.4	888.0	816.5
	<b>SUBTOTAL: TEN HIGHEST</b>	<b>20,353.6</b>	<b>19,898.4</b>	<b>18,524.0</b>	<b>19,316.1</b>	<b>18,542.4</b>	<b>19,326.9</b>	<b>23,092.0</b>	<b>19,045.7</b>
	<b>TOTAL: ALL SHALLOW DRAFT</b>	<b>68,283.8</b>	<b>59,674.6</b>	<b>61,222.9</b>	<b>82,919.6</b>	<b>63,233.7</b>	<b>67,066.9</b>	<b>83,340.0</b>	<b>74,264.0</b>
	<b>SHARE OF TOTAL</b>	<b>30%</b>	<b>33%</b>	<b>30%</b>	<b>23%</b>	<b>29%</b>	<b>29%</b>	<b>28%</b>	<b>26%</b>

SOURCE: Navigation Cost Recovery Data Base System (NCRDBS) Reports, FY 1977-1996, USACE, Institute for Water Resources

Deep draft projects in the top ten states cost almost \$346 million in FY 1996 or 75 percent of all those projects. The Mississippi River, Baton Rouge to the Gulf, costing over \$38 million, and three other projects costing \$8 to \$17 million helped boost Louisiana to first place in deep draft costs among the states. It was followed by Delaware, mainly due to the cost of the Delaware River from Philadelphia to the Sea, the Intracoastal Waterway form the Delaware River to Chesapeake Bay, and the St. Georges Bridge. The Delaware River project also borders Pennsylvania and New Jersey and the IWW also passes through Maryland.

The ten states with the highest harbor costs claimed over \$40 million or 55 percent of the \$74 million total in FY 1996 shallow draft costs. New York headed the list with shallow draft projects costing over \$10 million, followed by Florida with \$9.5 million and Louisiana with \$6.7 million. In six other states O&M costs for shallow draft harbors were between \$1 and \$5 million.

## **2.6 Navigation O&M Expenditures for Inland Waterways**

Expenditures in FY 1996 for the ten highest cost waterways were almost \$352 million and almost three-fourths of the total for all fuel-taxed waterways (see Table II-8 and Appendix C). The most expensive was the Upper Mississippi at \$89 million, followed by the Ohio, Lower Mississippi, and Gulf Intracoastal (GIWW), costing \$57 to \$36 million. The Arkansas, Atlantic Intracoastal (AIWW), and Illinois were next with \$27 to \$22 million while the Tennessee-Tombigbee, Black Warrior-Tombigbee (BWT), and Monongahela completed the top ten with costs of \$16 to \$14 million.

Actual 1996 costs fell below the amounts estimated in the President's budget for eight waterways. Exceptions were the Upper Mississippi, which was 7.4 percent and \$6.1 million higher than estimated, and the AIWW, which was 7.3 percent and \$1.8 million higher. Although the 1996 costs for the ten highest cost waterways were about \$11 million above the five year average for FY 1991-95 their 1996 costs were \$15 and \$17 million, respectively, below the amounts for FY 1994 and 1995.

There has been a steady decline from 81 to 74 percent in share of total waterways costs for the ten highest cost waterways over the FY 1991-96 period. This has been due in part to the relative stability in costs for many of the high cost waterways. The annual costs for the Monongahela, BWT, and Tenn-Tom haven't deviated much from their averages. The Upper Mississippi and GIWW costs in FY 1996 returned to average levels after surges in FY 1994 and 1995. On the Upper Mississippi the surge probably reflected increased maintenance costs caused by the Great Flood of 1993. The 43 percent jump in FY 1996 costs above the FY 1991-95 average is probably an aberration for the AIWW. The Lower Mississippi has been volatile, with annual costs ranging from \$49 to \$70 million.

**TABLE II-7**  
**NAVIGATION O&M EXPENDITURES FOR THE TEN STATES  
 WITH THE HIGHEST TOTAL PROJECT EXPENDITURES  
 (NON-FUEL TAX PROJECTS)**  
**FY 1996 (\$1,000)**

State	Deep Draft	Shallow Draft	TOTAL
Louisiana	77,247.1	6,722.2	83,969.3
Delaware	54,335.6	669.0	55,004.6
Texas	39,243.8	1,464.7	40,708.5
Oregon	36,877.0	3,129.3	40,006.3
California	32,241.7	1,432.6	33,674.3
New York	22,566.0	10,292.7	32,858.7
Michigan	27,081.2	2,330.8	29,412.0
Florida	19,179.3	9,540.0	28,719.4
Alabama	20,383.8	1,106.6	21,490.4
Washington	16,411.8	4,373.9	20,785.7
SUBTOTAL: TEN HIGHEST	345,567.4	40,484.3	386,051.7
TOTAL	461,722.0	74,264.0	536,166.6
TEN HIGHEST SHARE OF TOTAL	75%	55%	72%

SOURCE: FY 1996 Navigation Cost Recovery Data Base System (NCRDBS) Report,  
 USACE, Institute for Water Resources

**TABLE II-8**  
**NAVIGATION OF O&M EXPENDITURES\***  
**FOR THE TEN HIGHEST COST FUEL TAX WATERWAYS**  
**FY 1991-96 (\$1,000)**

NAME	1991	1992	1993	1994	1995	1991-95	Avg.	EST.
<b>Upper Mississippi</b>	<b>83,247.0</b>	<b>86,353.0</b>	<b>82,349.4</b>	<b>95,441.1</b>	<b>94,061.0</b>	<b>88,290.3</b>	<b>82,458.7</b>	<b>88,591.8</b>
<b>Lower Mississippi</b>	<b>64,431.0</b>	<b>74,070.0</b>	<b>48,593.0</b>	<b>59,340.7</b>	<b>58,406.4</b>	<b>60,968.2</b>	<b>61,284.0</b>	<b>49,180.0</b>
<b>Ohio</b>	<b>40,377.0</b>	<b>44,651.0</b>	<b>44,160.2</b>	<b>55,736.3</b>	<b>59,336.5</b>	<b>48,852.2</b>	<b>59,049.0</b>	<b>57,047.1</b>
<b>Gulf Intracoastal (GIWW)</b>	<b>29,886.0</b>	<b>37,219.0</b>	<b>33,602.1</b>	<b>40,124.1</b>	<b>46,265.8</b>	<b>37,419.4</b>	<b>41,972.0</b>	<b>36,234.9</b>
<b>Arkansas</b>	<b>24,581.0</b>	<b>24,937.0</b>	<b>23,981.8</b>	<b>27,912.3</b>	<b>27,817.9</b>	<b>25,846.0</b>	<b>30,132.0</b>	<b>27,186.8</b>
<b>Atlantic Intracoastal (AWW)</b>	<b>19,086.0</b>	<b>20,511.0</b>	<b>17,388.0</b>	<b>18,783.0</b>	<b>16,270.8</b>	<b>18,407.8</b>	<b>24,562.0</b>	<b>26,361.9</b>
<b>Illinois</b>	<b>15,758.0</b>	<b>17,149.0</b>	<b>15,272.2</b>	<b>19,368.5</b>	<b>19,489.9</b>	<b>17,407.5</b>	<b>22,001.0</b>	<b>21,934.8</b>
<b>Tennessee-Tombigbee</b>	<b>11,964.0</b>	<b>19,204.0</b>	<b>15,265.7</b>	<b>17,457.5</b>	<b>16,335.8</b>	<b>16,045.4</b>	<b>16,742.0</b>	<b>15,776.1</b>
<b>Black Warrior-Tombigbee</b>	<b>8,169.0</b>	<b>14,840.0</b>	<b>13,927.6</b>	<b>16,647.8</b>	<b>17,450.9</b>	<b>14,207.1</b>	<b>15,144.0</b>	<b>15,083.5</b>
<b>Monongahela</b>	<b>11,644.0</b>	<b>12,268.0</b>	<b>12,990.1</b>	<b>15,898.8</b>	<b>12,962.3</b>	<b>13,152.6</b>	<b>16,709.6</b>	<b>14,156.4</b>
<b>SUBTOTAL: Ten Highest</b>								
<b>TOTAL: All Waterways</b>	<b>381,924.1</b>	<b>453,764.8</b>	<b>396,923.3</b>	<b>481,562.7</b>	<b>489,090.7</b>	<b>440,653.1</b>	<b>493,090.7</b>	<b>475,960.0</b>

\* Costs include construction costs for dikes and revetments in the Mississippi River and Tributaries (MR&T) account, where such work is comparable to similar work funded by O&M. In FY 1996 MR&T dike and revetment navigation recoverable costs totaled \$23,081,500.

SOURCE: Navigation Cost Recovery Data Base System (NCRDBS) Reports, FY 1977-1996, USACE, Institute for Water Resources

Only three waterways showed clear, significant increases in O&M expenditures from FY 1991-93 to FY 1994-96. This would be true even if the data were in constant rather than actual dollars. On the Illinois average costs rose 26 percent and \$4.2 million from the beginning to the end of the period. The Ohio experienced the steepest increase of all, up 33 percent and \$14 million between FY 1991-93 and FY 1994-96.

The four most expensive waterways are all over 600 miles long, but their number of lock sites, the chamber sizes, and age and condition of the facilities vary considerably within each segment. The Lower Mississippi has no locks, the GIWW has only 12 lock sites or approximately one site per 100 miles, the Ohio has 20 sites or two per 100 miles, and the Upper Mississippi has 28 lock sites or about four per 100 miles. The Ohio River generally has more than one chamber at each lock site and its main chambers are generally 1200 feet long. In contrast, locks on the Upper Mississippi are mostly 600 feet long. Most Ohio River locks date from the 1950s and 1960s, but those on the Upper Mississippi date from the 1930s.

While the annual O & M costs for the Upper Mississippi are about 1.8 times greater than those for the Ohio, the ratio of the cost per lock site is only 1.3 to 1.0. The somewhat higher cost per lock site may be explained by the age and condition as well as dredging costs. Dredging costs on the Ohio were only ten percent of the navigation O & M costs in FY 1996, but the NCRDBS does not have a comparable breakout for the Upper Mississippi. Waterway system navigation dredging costs accounted for 14.9 percent of total navigation O&M costs in FY 1992 according to a preliminary detailed cost analysis. Note that dredging on the Missouri and White Rivers was not charged to navigation.

## 2.7 Navigation O&M Project Performance

The above discussion of navigation operation and maintenance expenditures has focused solely on the costs themselves and not on any outcome oriented measures of performance based on project utilization or efficiency. Such measures involve relating project costs to benefits or, in the absence of benefit data, other project outputs that reflect use, such as tons or ton-miles of traffic, the value of the cargo traffic, vessel traffic, or lockage and lock hardware cycles.

Navigation program and project performance measures have been fully addressed in several other reports completed recently or forthcoming later this year, including a major effort by the Corps Headquarters Directorate of Civil Works - Operations, Construction and Readiness Division on potential cost savings within the overall O&M program, and several other studies sponsored by the Civil Works Policy Analysis and Review Division (see references).

However, for the purpose of ready reference, some general information on navigation project performance has been included herein. Appendices I, J and K each include alphabetical listings of Corps navigation projects that match O&M expenditures and waterborne commerce data at the project level or by waterway segment. Appendix I includes data for 305 deep draft projects; Appendix J presents information on 733 shallow draft (not subject to inland waterway fuel tax) projects; and, Appendix K presents data on 28 inland waterway segments.

The O&M costs displayed in Appendices I, J and K were extracted from the Corps NCRDBS for the years (FY's) 1990-1994. Average annual O&M costs for port (deep draft) and harbor (shallow draft non-fuel taxed) projects were computed based on the eighteen year period FY 1977-1994. This average annual cost is presented in 1994 dollars, based on the use of the Dredging Cost Index developed by the Institute's Policy and Special Studies Division and based on IWR's Analysis of Dredging Quantities and Costs (FY 1963-1996). The average annual O&M costs for inland waterway segments was computed on the five year period FY 1990-1994.

Waterborne commerce data is presented in units of tons for port projects (Appendix I) and shallow draft non-fuel taxed harbors (Appendix J) and in ton-miles for the fuel taxed inland waterways (Appendix K). The list of port and harbor projects has not been screened to identify entrance or connecting channel projects where no tonnages are reported by WCSC because commodities are not loaded or unloaded within these project boundaries. Nevertheless, such projects are essential to the viability of many of the Nation's ports and harbors.

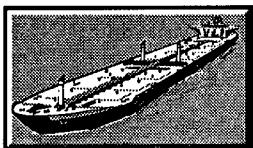
For ports and harbors the waterborne commerce tonnages displayed within Appendices I and J are for the period FY 1992-1994 with the average annual tons computed for this three year time frame. The ton-mile data for the inland waterway segments (Appendix K) is based on a five year (FY 1990-1994) average. While this ton-mile data for waterway segments is considered uniformly representative, the data for some low tonnage port and harbor projects, particularly those which primarily service commercial fishing or serve as a home port for a fishing fleet, may be seriously understated since much commercial fishing activity is unreported. Furthermore, the Corps only directly collects a very small amount of the national fishing data (most is collected by the National Marine Fisheries Service at the county level, and later proportionally disaggregated to the port or waterway level by WCSC) with the result that the scarce data that does exist is not considered uniformly reliable. Likewise, the tonnages for some subsistence ports which provide the only viable means of transporting cargo for populations in Alaska, Hawaii and the island territories may also be understated because of unreliable data for fishing activities.

Some general system-wide observations about project performance can be made based on this data as long as the caveats discussed above are kept in mind. A summary of the results appears on the next page (see Appendices I-K for complete details for each project). As can be seen from the summary, about 83% of the deep draft projects reported traffic during 1992-1994, and about 85% had O&M costs, 1977-1994. The overall portfolio averages about 16.5 cents-per-ton. The median O&M cost-per-ton of 55 cents is based on only those projects that had both O&M costs and reported traffic (232 projects). Even so, this median is indicative of a distribution of project costs-per-ton that includes a great number of projects above the average of 16.5 cents. Within the deep draft inventory, the group of 79 highest cost projects (average annual O&M > \$1 million) generally perform well with an average cost-per-ton only slightly above that for the overall category (19.9 versus 16.5 cents). Most of these 79 projects have relatively high traffic levels and low or moderate O&M cost-per-ton ratios, with the LA/Long Beach project having the lowest ratio at 1.25 cents per ton. Nevertheless, even some projects in this group do have relatively less reported traffic, resulting in very high cost-per-ton ratios.

	<u>Deep Draft Port Projects</u>	<u>Shallow Draft Harbor Projects</u>	<u>Inland Waterway Segments</u>
No.of Projects/Segments in Inventory	305	733	28
No.with Zero Avg. Annual O&M (1977-94)	46	324	0
No. with Avg. Annual O&M > Zero	259	409	28
No. With Avg. Annual O&M > \$1 Million	79	11	26
Total Average Annual O&M	\$405,536,000	\$57,412,000	\$ 423,114,000
Avg. Annual O&M per Project/Segment \$	1,566,000	\$ 140,400	\$ 15,111,000
No. Projects/Segments with Zero Tons Reported (1990-1994)	52	416	0
No. Projects with Tons Reported (1990-1994)	253	317	28
Avg. Annual Project/Segment O&M Cost per Ton (Project) or Ton-Mile (Segment)	16.5 cents/ ton	46.5 cents/ ton	0.16 cents/ ton-mile
Median Annual Project/Segment O&M Cost per Ton or Ton-Mile	54.9 cents/ ton	90.5 cents/ ton	0.89 cents/ ton-mile
O&M Cost per Ton or Ton-Mile for Projects with > \$ 1 Million Avg. Annual O&M	19.9 cents/ ton	1.20 dollars/ ton	0.16 cents/ ton-mile

As an overall group the shallow draft harbors tend to possess both lower annual O&M and traffic levels. Only about 43% of the shallow draft projects reported traffic during 1992-1994, although O&M frequency (almost 45% of the projects have had no O&M 1977-1994) and the average annual O&M per project (\$140,400) are much less than in the deep draft inventory. The overall shallow draft portfolio averaged 46.5 cents-per-ton, about 30 cents more than the deep draft category. With a median O&M cost- per-ton of 90.5 cents the performance distribution of the shallow draft group is also skewed by a significant number of high cost-per-ton projects. Only 11 projects have average annual O&M costs exceeding \$1 million, with nine of these expending between \$1-2 million annually and the highest averaging \$4.2 million per year. Unlike the deep draft portfolio, these highest cost projects generally have higher cost-per-ton ratios, with the group of 11 averaging about \$1.20 per ton. Again, however, many of the Corps shallow draft projects undoubtedly have substantial un-reported commercial fishing and recreation activity.

Performance on the waterways system is not directly comparable to port and harbors because O&M costs are aggregated by waterway segment, and traffic data is measured in ton-miles as a more meaningful utilization indicator. The overall cost-per-ton-mile for the system is 0.16 cents. The ten highest cost waterways have very low to moderate costs-per-ton-mile, and none are high cost per ton-mile, including the Lower and Middle Mississippi River, the Ohio River, and the GIWW segments . Although many of the remaining 18 waterways have relatively lower annual average O&M costs, their often relatively modest traffic levels result in only moderate to very high costs-per-ton-mile.



## **Navigation Operation and Maintenance: Expenditures for Harbors and Waterways Fiscal Year 1996**

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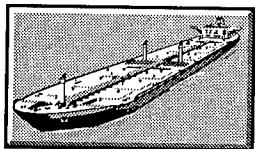
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**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
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**APPENDIX A - Deep Draft Navigation Projects,  
Navigation Cost Recovery Analysis by Segment,  
O&M Expenditures for FY 1996 (Actual).**

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No.	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO.
4	MISS R-B FGE TO GULF LA	LMN	38460.69	38460.69	0.00	0.00	38460.69	SINGLE PUR NAV	68
4	ATCH R MORGAN CTY-GULF LA	LMN	8250.25	8250.25	0.00	0.00	8250.25	SINGLE PUR NAV	680
4	BRAZOS IS TX	SWG	673.91	673.91	0.00	0.00	673.91	SINGLE PUR NAV	1990
4	CALCASIEUR PASS LA	LMN	8707.58	8707.58	0.00	0.00	8707.58	SINGLE PUR NAV	2440
4	CH TO FT BOLIVAR TX	SWG	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	2930
4	FREEPORT HBR TX	SWG	5947.44	5947.44	0.00	0.00	5947.44	SINGLE PUR NAV	6170
4	GALVESTON HBR CH TX	SWG	321.20	321.20	0.00	0.00	321.20	SINGLE PUR NAV	6340
4	HOUMA NAV CANAL LA	LMN	1643.83	1643.83	0.00	0.00	1643.83	SINGLE PUR NAV	7760
4	HOUSTON SHIP CHNL	SWG	4305.67	4305.67	0.00	0.00	4305.67	SINGLE PUR NAV	7780
4	CHANNEL TO RED BLUFF, TX	SWG	151.61	151.61	0.00	0.00	151.61	SINGLE PUR NAV	8213
4	7.5 MCY STANDBY TIME	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	8236
4	MATAGORDA SHIP CHNL TX	SWG	3844.89	3844.89	0.00	0.00	3844.89	SINGLE PUR NAV	10810
4	MERMENTAU RIVER LA	LMN	3180.31	3180.31	0.00	0.00	3180.31	MULTI TWO ALLOC	11030
4	MISS R-GULF OUTLET LA	LMN	17004.48	17004.48	0.00	0.00	17004.48	SINGLE PUR NAV	11410
4	CORPUS CHRISTI CH TX	SWG	2876.19	2876.19	0.00	0.00	2876.19	SINGLE PUR NAV	14340
4	SABINE-NECHEES WW TX	SWG	17118.47	17118.47	0.00	0.00	17118.47	SINGLE PUR NAV	15780
4	TEXAS CITY TX	SWG	1640.88	1640.88	0.00	0.00	1640.88	SINGLE PUR NAV	18130
4	BAYPORT SHIP CHANNEL	SWG	2438.66	2438.66	0.00	0.00	2438.66	SINGLE PUR NAV	88910
4	GREENS BAYOU CHANNEL, TX	SWG	0.23	0.23	0.00	0.00	0.23	SINGLE PUR NAV	88911
4	BARBOUR TERMINAL SHIP CNL	SWG	-75.33	-75.33	0.00	0.00	-75.33	SINGLE PUR NAV	88912
4			16491.96	16491.96	0.00	0.00	16491.96		
5	BAYOU LABATRE AL	SAM	39.72	39.72	0.00	0.00	39.72	SINGLE PUR NAV	1120
5	CHARLOTTE HARBOR FL	SAC	94.47	94.47	0.00	0.00	94.47	SINGLE PUR NAV	3000
5	GULFPORT HARBOR MS	SAM	1643.96	1643.96	0.00	0.00	1643.96	SINGLE PUR NAV	7150

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
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**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
5	MOBILE HBR AL	SAM	20344.11	20344.11	0.00	0.00	20344.11	SINGLE PUR NAV	11670
5	PANAMA CITY HBR FL	SAM	706.19	706.19	0.00	0.00	706.19	SINGLE PUR NAV	13640
5	PASCAGOULA HBR MS	SAM	1644.91	1644.91	0.00	0.00	1644.91	SINGLE PUR NAV	13680
5	PENSACOLA HBR FL	SAM	0.30	0.30	0.00	0.00	0.30	SINGLE PUR NAV	13830
5	PT ST. JOE HBR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	14390
5	TAMPA HARBOR FL	SAJ	3099.52	3099.52	0.00	0.00	3099.52	SINGLE PUR NAV	17960
5	ST. PETERSBURG HBR FL	SAJ	38.87	38.87	0.00	0.00	38.87	SINGLE PUR NAV	74390
5	CARRABELLE HARBOR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	76018
5			27612.05	27612.05	0.00	0.00	27612.05		
24	GT SODUS BAY HBR NY	NCB	293.84	293.84	0.00	0.00	293.84	SINGLE PUR NAV	6860
24	LITTLE SODUS BAY HBR NY	NCB	219.49	219.49	0.00	0.00	219.49	SINGLE PUR NAV	9970
24	OSWEGO HBR NY	NCB	393.56	393.56	0.00	0.00	393.56	SINGLE PUR NAV	13440
24	ROCHESTER HBR NY	NCB	37.43	37.43	0.00	0.00	37.43	SINGLE PUR NAV	15390
24			944.32	944.32	0.00	0.00	944.32		
25	ASHTABULA HBR OH	NCB	428.46	428.46	0.00	0.00	428.46	SINGLE PUR NAV	650
25	BL ROCK CH TONAWANDA HBR	NCB	3546.51	3546.51	0.00	0.00	3546.51	SINGLE PUR NAV	1660
25	BUFFALO HBR NY	NCB	613.47	613.47	0.00	0.00	613.47	SINGLE PUR NAV	2140
25	CLEVELAND HBR OH	NCB	5440.47	5440.47	0.00	0.00	5440.47	SINGLE PUR NAV	3430
25	CONNEAUT HBR OH	NCB	649.44	649.44	0.00	0.00	649.44	SINGLE PUR NAV	3770
25	DETROIT RVR MI	NCE	4980.58	4980.58	0.00	0.00	4980.58	SINGLE PUR NAV	4710
25	ERIE HBR PA	NCB	895.61	895.61	0.00	0.00	895.61	SINGLE PUR NAV	5600
25	FAIRPORT HBR OH	NCB	329.96	329.96	0.00	0.00	329.96	SINGLE PUR NAV	5760
25	HURON HBR OH	NCB	1229.99	1229.99	0.00	0.00	1229.99	SINGLE PUR NAV	7920

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOCATED SPEC	OTHER ALLOCATED SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
25	LORAIN HBR OH	NCB	2089.37	2089.37	0.00	0.00	2089.37	SINGLE PUR NAV	10060
25	MONROE HBR MI	NCE	155.35	155.35	0.00	0.00	155.35	SINGLE PUR NAV	11760
25	ROUGE RVR MI	NCE	102.57	102.57	0.00	0.00	102.57	SINGLE PUR NAV	15590
25	SANDUSKY HBR OH	NCB	109.76	109.76	0.00	0.00	109.76	SINGLE PUR NAV	16260
25	TOLEDO HBR OH	NCB	2973.53	2973.53	0.00	0.00	2973.53	SINGLE PUR NAV	18280
25	DUNKIRK HBR NY	NCB	262.10	262.10	0.00	0.00	262.10	SINGLE PUR NAV	50600
26			23801.47	23801.47	0.00	0.00	23801.47		
26	BLACK RIVER-PORT HURON RVR	NCE	3.53	3.53	0.00	0.00	3.53	SINGLE PUR NAV	1110
26	CHS-LKE ST CLAIR MI	NCE	127.39	127.39	0.00	0.00	127.39	SINGLE PUR NAV	2940
26	HARBOR BEACH HBR MI	NCE	3.04	3.04	0.00	0.00	3.04	SINGLE PUR NAV	7300
26	ST CLAIR RVR MI	NCE	812.18	812.18	0.00	0.00	812.18	SINGLE PUR NAV	17300
26	ST MARYS R MI	NCE	17630.60	11375.00	2477.20	3778.40	11752.84	MULTI WO ALLOC	17380
26	SAGINAW RIVER DIKE DISPOSAL	NCE	8.72	8.72	0.00	0.00	8.72	SINGLE PUR NAV	44064
26	SAGINAW RVR MI	NCE	1831.01	1831.01	0.00	0.00	1831.01	SINGLE PUR NAV	57420
26	CHEYBOYGAN HBR MI	NCE	3.75	3.75	0.00	0.00	3.75	SINGLE PUR NAV	74203
26			20421.22	14164.62	2477.20	3778.40	14542.46		
27	BURNS WW HBR IN	NCC	890.81	890.81	0.00	0.00	890.81	SINGLE PUR NAV	2250
27	CALUMET HBR IL	NCC	571.70	571.70	0.00	0.00	571.70	SINGLE PUR NAV	2410
27	CHARLEVOIX HBR MI	NCE	223.25	223.25	0.00	0.00	223.25	SINGLE PUR NAV	2990
27	CHICAGO RVR IL	NCC	370.09	370.09	0.00	0.00	370.09	SINGLE PUR NAV	3810
27	FRANKFORT HBR MI	NCE	3.07	3.07	0.00	0.00	3.07	SINGLE PUR NAV	6130
27	GD HAVEN HBR MI	NCE	1262.81	1262.81	0.00	0.00	1262.81	SINGLE PUR NAV	6670
27	GRAND HAVEN HBR MIT SHR DM	NCE	64.20	64.20	0.00	0.00	64.20	SINGLE PUR NAV	6671

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC-SPEC	OTHER ALLOC-SPEC USE	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
								AMOUNT	TYPE
27	GREEN BAY HBR WI	NCE	1515.67	1515.67	0.00	0.00	1515.67	SINGLE PUR NAV	6910
27	HOLLAND HARBOR MI	NCE	530.20	530.20	0.00	0.00	530.20	SINGLE PUR NAV	7610
27	HOLLAND HBR MIT SHR DAM MI	NCE	56.00	56.00	0.00	0.00	56.00	SINGLE PUR NAV	7611
27	KENOSHA HARBOR WI	NCE	47.90	47.90	0.00	0.00	47.90	SINGLE PUR NAV	8910
27	LUDINGTON HARBOR MI	NCE	349.77	349.77	0.00	0.00	349.77	SINGLE PUR NAV	10270
27	MANISTEE HARBOR MI	NCE	277.03	277.03	0.00	0.00	277.03	SINGLE PUR NAV	10480
27	MANITOWOC HBR WI	NCE	120.78	120.78	0.00	0.00	120.78	SINGLE PUR NAV	10510
27	MICHIGAN CTY HBR IN	NCC	613.88	613.88	0.00	0.00	613.88	SINGLE PUR NAV	11060
27	MILWAUKEE HBR WI	NCE	4247.21	4247.21	0.00	0.00	4247.21	SINGLE PUR NAV	11270
27	MUSKEGON HBR MI	NCE	681.62	681.62	0.00	0.00	681.62	SINGLE PUR NAV	12060
27	MUSKEGON HARBOR MITIGATION	NCE	188.78	188.78	0.00	0.00	188.78	SINGLE PUR NAV	12061
27	PENTWATER HBR MI	NCE	421.19	421.19	0.00	0.00	421.19	SINGLE PUR NAV	13850
27	PT WASHINGTON HBR WI	NCE	1.35	1.35	0.00	0.00	1.35	SINGLE PUR NAV	14420
27	ST JOSEPH HBR MI	NCE	801.97	801.97	0.00	0.00	801.97	SINGLE PUR NAV	17350
27	ST. JOSEPH HBR MIT SHR DAM	NCE	719.03	719.03	0.00	0.00	719.03	SINGLE PUR NAV	17351
27	STURGEON B & L MICH CAN, WI	NCE	117.97	117.97	0.00	0.00	117.97	SINGLE PUR NAV	17660
27	INDIANA HBR IN	NCC	486.19	486.19	0.00	0.00	486.19	SINGLE PUR NAV	18120
27	TWO RVR'S HBR WI	NCE	1103.45	1103.45	0.00	0.00	1103.45	SINGLE PUR NAV	18710
27	WAUKEGAN HBR IL	NCC	644.95	644.95	0.00	0.00	644.95	SINGLE PUR NAV	19560
27	WHITE LAKE HBR MI	NCE	107.78	107.78	0.00	0.00	107.78	SINGLE PUR NAV	19810
27	PORTAGE LAKE HBR MI	NCE	130.34	130.34	0.00	0.00	130.34	SINGLE PUR NAV	21530
27	OCONTO HBR WI	NCE	0.74	0.74	0.00	0.00	0.74	SINGLE PUR NAV	23370
27	CHICAGO HBR IL	NCC	5405.14	5405.14	0.00	0.00	5405.14	SINGLE PUR NAV	45009
27	MENOMINEE HBR MI	NCE	26.41	26.41	0.00	0.00	26.41	SINGLE PUR NAV	45044
27	SHEBOYGAN HBR WI	NCE	87.17	87.17	0.00	0.00	87.17	SINGLE PUR NAV	66700

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC	OTHER SPEC ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
27	WHITE LK HBR MIT SHR DAM	NCE	210.09	210.09	0.00	0.00	210.09	SINGLE PUR NAV	74176
27	GREEN BAY HBR DIKE DISP WI	NCE	144.28	144.28	0.00	0.00	144.28	SINGLE PUR NAV	74180
27	KEWAUNEE HARBOR WI	NCE	240.32	240.32	0.00	0.00	240.32	SINGLE PUR NAV	76050
27			22643.14	22643.14	0.00	0.00	22643.14		
28	ASHLAND HBR MI	NCE	4.55	4.55	0.00	0.00	4.55	SINGLE PUR NAV	630
28	DULUTH-SUPERIOR MN	NCE	3264.30	2750.90	513.40	0.00	2750.90	SINGLE PUR NAV	5050
28	KEWEENAW WV MI	NCE	481.96	481.96	0.00	0.00	481.96	SINGLE PUR NAV	8960
28	ONTONAGON HBR MI	NCE	769.35	769.35	0.00	0.00	769.35	SINGLE PUR NAV	13330
28	TWO HBRS MN	NCE	3.27	3.27	0.00	0.00	3.27	SINGLE PUR NAV	18700
28	GRAND MARAIS HBR MI	NCE	8.00	8.00	0.00	0.00	8.00	SINGLE PUR NAV	46064
28	PRESQUE ISLE HBR MI	NCE	0.85	0.85	0.00	0.00	0.85	SINGLE PUR NAV	48012
28	MARQUETTE HBR MI	NCE	1.95	1.95	0.00	0.00	1.95	SINGLE PUR NAV	48013
28	PORT WING HBR WI	NCE	1.03	1.03	0.00	0.00	1.03	SINGLE PUR NAV	74190
28	GRAND MARAIS HBR MN	NCE	2.67	2.67	0.00	0.00	2.67	SINGLE PUR NAV	99871
28			4557.93	4024.53	513.40	0.00	4024.53		
29	ABSECON INLET NJ	NAP	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	80
29	POTOMAC R BLW WASH DC	NAB	90.82	90.82	0.00	0.00	90.82	SINGLE PUR NAV	294
29	PORTLAND HBR ME	NED	145.45	145.45	0.00	0.00	145.45	SINGLE PUR NAV	367
29	PTSMTH HBR PISTAQUA RIVER	NED	2.71	2.71	0.00	0.00	2.71	SINGLE PUR NAV	512
29	PROVIDENCE R & HBR RI	NED	124.59	124.59	0.00	0.00	124.59	SINGLE PUR NAV	566
29	SAKONNET HBR RI	NED	0.16	0.16	0.00	0.00	0.16	SINGLE PUR NAV	568
29	POTOMAC R AT ALEX VA	NAB	36.59	36.59	0.00	0.00	36.59	SINGLE PUR NAV	597
29	BALT HBR CHS MD & VA	NAB	2541.26	2541.26	0.00	0.00	2541.26	SINGLE PUR NAV	870

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS No
29	BALTIMORE HBR DRIFT REMOVL	NAB	378.11	378.11	0.00	0.00	378.11	SINGLE PUR NAV	871
29	BALTIMORE HBR PREV OF OBST	NAB	503.24	503.24	0.00	0.00	503.24	SINGLE PUR NAV	872
29	HAMPTON ROADS DRIFT REMOVI	NAO	676.15	676.15	0.00	0.00	676.15	SINGLE PUR NAV	1002
29	BAY RDGE RED HOOK CH NY	NAN	39.50	39.50	0.00	0.00	39.50	SINGLE PUR NAV	1040
29	BOSTON HBR MA	NED	71.77	71.77	0.00	0.00	71.77	SINGLE PUR NAV	1960
29	CAPE COD CNL MA	NED	7299.24	6587.90	711.34	0.00	6587.90	SINGLE PUR NAV	2620
29	CONN RVR BLW HARTFRD	NED	49.91	49.91	0.00	0.00	49.91	SINGLE PUR NAV	3760
29	DEL RVR BETWN PHILA TREN	NAP	3363.17	3363.17	0.00	0.00	3363.17	SINGLE PUR NAV	4550
29	DEL RVR PA NJ PHILA TO S	NAP	20586.48	20586.48	0.00	0.00	20586.48	SINGLE PUR NAV	4570
29	HUDSON R. CHANNEL, NY	NAN	-50.43	-50.43	0.00	0.00	-50.43	SINGLE PUR NAV	7800
29	HUDSON R NY TO ALB(MNT)	NAN	2391.90	2391.90	0.00	0.00	2391.90	SINGLE PUR NAV	7810
29	HUDSON R NY TO ALB(O&C)	NAN	1109.33	1109.33	0.00	0.00	1109.33	SINGLE PUR NAV	7820
29	IWW FM DEL R TO CHPKE B D	NAP	17690.73	17690.73	0.00	0.00	17690.73	SINGLE PUR NAV	8160
29	C&D CAN, ST GEORGES BR DE	NAP	14001.34	14001.34	0.00	0.00	14001.34	SINGLE PUR NAV	8215
29	7.5 MCY STANDBY TIME	NAP	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	8237
29	JAMES RVR VA	NAO	3945.26	3945.26	0.00	0.00	3945.26	SINGLE PUR NAV	8430
29	KENNEBEC RIVER ME	NED	10.39	10.39	0.00	0.00	10.39	SINGLE PUR NAV	8890
29	NEW HVN HBR CONN	NED	0.11	0.11	0.00	0.00	0.11	SINGLE PUR NAV	12380
29	NEW YORK HARBOR NY	NAN	6471.46	6471.46	0.00	0.00	6471.46	SINGLE PUR NAV	12490
29	NEW YORK HBR DRIFT, NY	NAN	4986.70	4986.70	0.00	0.00	4986.70	SINGLE PUR NAV	12500
29	NY NJ CHS NY NJ	NAN	77.24	77.24	0.00	0.00	77.24	SINGLE PUR NAV	12520
29	NWRK B HCKSAK PASS R NJ	NAN	365.26	365.26	0.00	0.00	365.26	SINGLE PUR NAV	12550
29	NORFOLK HBR CHS VA	NAO	6191.46	6191.46	0.00	0.00	6191.46	SINGLE PUR NAV	12801
29	PLYMOUTH HBR MA	NED	1.36	1.36	0.00	0.00	1.36	SINGLE PUR NAV	14200
29	POTOMAC R. DRIFT REMOVL VA	NAB	858.59	858.59	0.00	0.00	858.59	SINGLE PUR NAV	14520

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

SEC NO	PROJECT NAME	BIVY DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
29	RARITAN RIVER NJ	NAN	-126.39	-126.39	0.00	0.00	-126.39	SINGLE PUR NAV	14860
29	HAMPTON ROADS PRE OF OBST	NAO	310.50	310.50	0.00	0.00	310.50	SINGLE PUR NAV	15170
29	SCHUYLKILL R PA	NAP	1916.71	1916.71	0.00	0.00	1916.71	SINGLE PUR NAV	16550
29	NY HABOR PREV OF OBSTRUCT	NAN	709.43	709.43	0.00	0.00	709.43	SINGLE PUR NAV	17760
29	WASHINGTON HBR DC	NAB	35.05	35.05	0.00	0.00	35.05	SINGLE PUR NAV	19500
29	WILMINGTON HBR DEL	NAP	2057.04	2057.04	0.00	0.00	2057.04	SINGLE PUR NAV	20040
29	RTN R ARTHR KILL CUT C NJ	NAN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	21870
29	COLD SPRNG INLET	NAP	520.16	520.16	0.00	0.00	520.16	SINGLE PUR NAV	22140
29	SALEM RIVER NJ	NAP	2.41	2.41	0.00	0.00	2.41	SINGLE PUR NAV	24950
29	BUTTERMILK CH NY	NAN	819.85	819.85	0.00	0.00	819.85	SINGLE PUR NAV	41015
29	EAST RIVER NY	NAN	84.38	84.38	0.00	0.00	84.38	SINGLE PUR NAV	41062
29	DEL RIV/PHL TO CAMDEN NJ	NAP	24.30	24.30	0.00	0.00	24.30	SINGLE PUR NAV	43005
29	JAMAICA BAY NY	NAN	637.47	637.47	0.00	0.00	637.47	SINGLE PUR NAV	54000
29	PT JUDTH PND&HBR OF REF RI	NED	124.50	124.50	0.00	0.00	124.50	SINGLE PUR NAV	72611
29	BLOCK ISLAND HBR OF REF RI	NED	75.78	75.78	0.00	0.00	75.78	SINGLE PUR NAV	73445
29	CAPE CHARLES CITY HBR VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73772
29	CH TO NEWPORT NEWS VA	NAO	947.23	947.23	0.00	0.00	947.23	SINGLE PUR NAV	73783
29	THIMBLE SHOAL CH VA	NAO	1205.10	1205.10	0.00	0.00	1205.10	SINGLE PUR NAV	73800
29	YORK RIVER VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73803
29	C&D CAN BRIDGES MAJ REHAB	NAP	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73836
29	BALTIMORE HBR & 50FT CHANN	NAB	8776.74	8776.74	0.00	0.00	8776.74	SINGLE PUR NAV	74955
29			112661.1	11366.77		71.34	1.00		11368.77
30	BEAUFORT HBR NC	SAW	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	1210
30	BRUNSWICK HBR	SAS	3398.54	3398.54	0.00	0.00	3398.54	SINGLE PUR NAV	2080

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV/ DIST	NAVIGATION TOTAL ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
30	CANAVERAL HARBOR FL	SAJ	2970.54	2970.54	0.00	0.00	2970.54	SINGLE PUR NAV
30	CAPE FEAR R ABOVE WILM NC	SAW	415.10	273.60	141.50	0.00	273.60	SINGLE PUR NAV
30	CHARLESTON HARBOR SC	SAC	3533.45	3533.45	0.00	0.00	3533.45	SINGLE PUR NAV
30	FERNANDINA HARBOR FL	SAJ	1403.25	1403.25	0.00	0.00	1403.25	SINGLE PUR NAV
30	FORT PIERCE HARBOR FL	SAJ	274.30	274.30	0.00	0.00	274.30	SINGLE PUR NAV
30	GEORGETOWN HARBOR SC	SAC	2423.17	2423.17	0.00	0.00	2423.17	SINGLE PUR NAV
30	CHAS HBR REDIVERSN FISH LF	SAC	331.60	331.60	0.00	0.00	331.60	SINGLE PUR NAV
30	SAVANAH HBR LONG TRM MGT	SAS	9.84	9.84	0.00	0.00	9.84	SINGLE PUR NAV
30	JACKSONVILLE HARBOR FL	SAJ	7742.50	7742.50	0.00	0.00	7742.50	SINGLE PUR NAV
30	MOREHD CTY HBR NC	SAW	2313.10	2313.10	0.00	0.00	2313.10	SINGLE PUR NAV
30	PALM BEACH HBR FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
30	PALM BEACH HBR FL	SAJ	1613.62	1613.62	0.00	0.00	1613.62	SINGLE PUR NAV
30	PORT ROYAL HARBOR SC	SAC	932.98	932.98	0.00	0.00	932.98	SINGLE PUR NAV
30	SHIPYARD RVR SC	SAC	726.82	726.82	0.00	0.00	726.82	SINGLE PUR NAV
30	WILMINGTON BW NC	SAW	7545.03	7545.03	0.00	0.00	7545.03	SINGLE PUR NAV
30	COOPER R SC	SAC	2824.98	2808.98	16.00	0.00	2808.98	SINGLE PUR NAV
30	MIAMI HBR FL	SAJ	188.11	188.11	0.00	0.00	188.11	SINGLE PUR NAV
30	DARIEN HARBOR, GA	SAS	0.99	0.99	0.00	0.00	0.99	SINGLE PUR NAV
30	SAVANNAH HBR	SAS	14092.57	14092.57	0.00	0.00	14092.57	SINGLE PUR NAV
30	PORT EVERGLADES HBR FL	SAJ	47.67	47.67	0.00	0.00	47.67	SINGLE PUR NAV
			<b>52788.16</b>	<b>52636.66</b>	<b>157.50</b>	<b>\$1.00</b>	<b>52630.66</b>	
31	BELLINGHAM HBR WA	NPS	328.31	328.31	0.00	0.00	328.31	SINGLE PUR NAV
31	EVERETT HBR SNOHOMISH RV	NPS	912.49	912.49	0.00	0.00	912.49	SINGLE PUR NAV
31	LK WASHINGTON SHP CNL WA	NPS	6419.80	5904.50	515.30	0.00	5904.50	SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No.	PROJECT NAME	DIV/ DIST	TOTAL ALLOC SPEC	NAVIGATION ALLOC SPEC	OTHER ALLOC SPEC	JOINT USE	RECOVERY AMOUNT	PROTECT TYPE	CWIS NO.
31	OLYMPIA HBR WA	NPS	16.22	16.22	0.00	0.00	16.22	SINGLE PUR NAV	13320
31	PUGET SOUND ITS TRIB WW	NPS	756.49	756.49	0.00	0.00	756.49	SINGLE PUR NAV	13970
31	FRIDAY HARBOR	NPS	70.82	70.82	0.00	0.00	70.82	SINGLE PUR NAV	24370
31	SEATTLE HBR WA	NPS	622.60	622.60	0.00	0.00	622.60	SINGLE PUR NAV	67318
31	TACOMA HBR WA	NPS	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	72902
31	LAKE CROCKETT WA	NPS	2.06	2.06	0.00	0.00	2.06	SINGLE PUR NAV	72920
31	EDIZ HOOK WA	NPS	5.32	5.32	0.00	0.00	5.32	SINGLE PUR NAV	79205
31	KENMORE NAVIGATION CH	NPS	95.53	95.53	0.00	0.00	95.53	SINGLE PUR NAV	87153
31			9223.64	8714.34	515.39	1.00	8714.34		
32	COLUMBIA R AT MOTH OR WA	NPP	6661.66	6661.66	0.00	0.00	6661.66	SINGLE PUR NAV	3600
32	COL R BTN VNCR DALLES OR	NPP	249.83	249.83	0.00	0.00	249.83	SINGLE PUR NAV	3620
32	COLMBA LWR WLMT RVR OR	NPP	17041.83	17041.83	0.00	0.00	17041.83	SINGLE PUR NAV	3630
32	7.5 MCY STANDBY TIME	NPP	0.26	0.26	0.00	0.00	0.26	SINGLE PUR NAV	8238
32	SKIPANON CHANNEL OR	NPP	15.89	15.89	0.00	0.00	15.89	SINGLE PUR NAV	16930
32	BONNEVILLE LOCK DAM OR WA	NPP	19131.90	6761.80	12370.10	0.00	6761.80	MULTI W ALLOC	80546
32			47401.37	3073.27	12370.10	0.00	3073.27		
33	PORT SAN LUIS CA	SPL	0.80	0.80	0.00	0.00	0.80	SINGLE PUR NAV	232
33	COOS BAY OR	NPP	2635.31	2635.31	0.00	0.00	2635.31	SINGLE PUR NAV	3840
33	DANA POINT HARBOR CA	SPL	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	4430
33	GRAYS HBR WA	NPS	7560.15	7560.15	0.00	0.00	7560.15	SINGLE PUR NAV	6770
33	HUMBOLDT HBR BAY CA	SPN	2600.45	2600.45	0.00	0.00	2600.45	SINGLE PUR NAV	7860
33	MORRO BAY HBR CA	SPL	1672.07	1672.07	0.00	0.00	1672.07	SINGLE PUR NAV	11860
33	MOSS LANDING HBR CA	SPN	778.98	778.98	0.00	0.00	778.98	SINGLE PUR NAV	11880

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEC NO	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
33	OCEANSIDE HBR CA	SPL	317.66	317.66	0.00	0.00	317.66	SINGLE PUR NAV	13080
33	OCEANSIDE HBR SAND-BY-PASS	SPL	655.22	655.22	0.00	0.00	655.22	SINGLE PUR NAV	13085
33	CH IS HBR CA	SPL	1875.33	1875.33	0.00	0.00	1875.33	SINGLE PUR NAV	14360
33	PORT ORFORD OR	NPP	465.94	465.94	0.00	0.00	465.94	SINGLE PUR NAV	14370
33	SANTA BARBARA HBR CA	SPL	1543.58	1543.58	0.00	0.00	1543.58	SINGLE PUR NAV	15730
33	SAN DIEGO-MISSION BAY CA	SPL	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	15750
33	SAN DIEGO HBR CA	SPL	650.46	650.46	0.00	0.00	650.46	SINGLE PUR NAV	16110
33	SUSLAW RIVER OR	NPP	394.96	394.96	0.00	0.00	394.96	SINGLE PUR NAV	16860
33	TILLAMOOK BAY BAR OR	NPP	7.21	7.21	0.00	0.00	7.21	SINGLE PUR NAV	18230
33	UMPQUA RIVER OR	NPP	707.81	707.81	0.00	0.00	707.81	SINGLE PUR NAV	18750
33	WILLAPA HBR	NPS	137.33	137.33	0.00	0.00	137.33	SINGLE PUR NAV	19990
33	YAQUINA BAY HBR OR	NPP	1725.48	1725.48	0.00	0.00	1725.48	SINGLE PUR NAV	20290
33	VENTURA HBR CA	SPL	1968.56	1968.56	0.00	0.00	1968.56	SINGLE PUR NAV	24190
33	MARINA DEL REY CA	SPL	1177.23	1177.23	0.00	0.00	1177.23	SINGLE PUR NAV	37690
33	PT HUENEME CA	SPL	68.03	68.03	0.00	0.00	68.03	SINGLE PUR NAV	74656
33	L A AND LONG BEACH HBRS CA	SPL	1001.05	1001.05	0.00	0.00	1001.05	SINGLE PUR NAV	74719
33	NEWPORT HARBOR CA	SPL	140.68	140.68	0.00	0.00	140.68	SINGLE PUR NAV	74720
33	REDONDO BEACH KING HBR CA	SPL	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	74722
33	LA-LB HARBOR MODEL, CA	SPL	205.60	205.60	0.00	0.00	205.60	SINGLE PUR NAV	76101
			2826.36	2826.36	0.00	0.00	2826.36		
34	OAKLAND HBR CA	SPN	733.08	733.08	0.00	0.00	733.08	SINGLE PUR NAV	12990
34	REDWOOD CITY HBR CA	SPN	4700.00	4700.00	0.00	0.00	4700.00	SINGLE PUR NAV	15100
34	RICHMOND HBR CA	SPN	2264.24	2264.24	0.00	0.00	2264.24	SINGLE PUR NAV	15280
34	SACRAMENTO RVCA	SPK	1312.12	1312.12	0.00	0.00	1312.12	SINGLE PUR NAV	15870

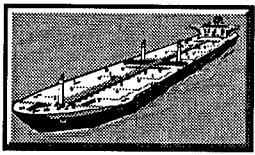
TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

SEG No	PROJEC T NAME	BIV/ DIST	NAVI GATION ALLOC/SPC	OTHER USE	JOINT RECOVERY AMOUNT	PROMPT TYPE	CMS NO
34	SAN FRANCISCO HBR CA	SPN	2080.35	2080.35	0.00	2080.35	SINGLE PUR NAV 16130
34	SAN FRANCISCO HBR DRFT REM	SPN	2066.07	2066.07	0.00	2066.07	SINGLE PUR NAV 16140
34	SAN JOAQUIN RVR CA	SPK	822.85	822.85	0.00	822.85	SINGLE PUR NAV 16180
34	S PABLO BAY MRE IS STR CA	SPN	299.91	299.91	0.00	299.91	SINGLE PUR NAV 16230
34	SUISUN BAY CHANNEL CA	SPN	960.82	960.82	0.00	960.82	SINGLE PUR NAV 17720
34	NAPA RVR CA	SPN	35.37	35.37	0.00	35.37	SINGLE PUR NAV 74703
34	S FRANCISCO BAY DLT MDL CA	SPN	2609.75	1599.75	1010.00	1599.75	SINGLE PUR NAV 76029
34	SF BAY LONG TERM MGT STRAT	SPN	711.44	711.44	0.00	711.44	SINGLE PUR NAV 88920
34			1836.46	1356.46	1319.03	1319.03	
35	ST PAUL HARBOR AK	NPA	-0.50	-0.50	0.00	0.00	-0.50 SINGLE PUR NAV 10169
35			-0.50	-0.50	0.00	0.00	-0.50
36	ANCHORAGE HBR AK	NPA	1494.19	1494.19	0.00	1494.19	SINGLE PUR NAV 360
36	SEWARD HARBOR, OR	NPA	209.01	209.01	0.00	209.01	SINGLE PUR NAV 72765
36	HOMER HBR AK	NPA	186.66	186.66	0.00	186.66	SINGLE PUR NAV 80508
36			183.66	183.66	0.00	183.66	
37	THOMAS BASIN (KETCHIKAN)	NPA	264.22	264.22	0.00	264.22	SINGLE PUR NAV 631
37	CRESCENT BAY HARBOR, AK	NPA	0.00	0.00	0.00	0.00	SINGLE PUR NAV 16840
37	WRANGELL NARROWS AK	NPA	-7.05	-7.05	0.00	-7.05	SINGLE PUR NAV 65015
37	KETCHIKAN BAR PT HBR, AK	NPA	136.59	136.59	0.00	136.59	SINGLE PUR NAV 87071
37			133.76	133.76	0.00	133.76	
38	HONOLULU HBR HI	POD	8.74	8.74	0.00	8.74	SINGLE PUR NAV 7660

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC SHET		OTHER ALLOC SEC	JOINT USE	PROJECT TYPE	CWS NO
				LOG	SEC				
38	OFU HBR SAMOA	POD	0.63		0.63	0.00	0.00	0.63	87038
			9.37		9.37	0.00	0.00	9.37	
39	SAN JUAN HBR PR	SAJ	44.28		44.28	0.00	0.00	44.28	16190
39	ARECIBO HBR PR	SAJ	0.00		0.00	0.00	0.00	0.00	20500
39	MAYAGUEZ HBR PR	SAJ	0.00		0.00	0.00	0.00	0.00	22280
39	PONCE HBR PR	SAJ	0.00		0.00	0.00	0.00	0.00	75007
39			44.28		44.28	0.00	0.00	44.28	
	<b>GRAND TOTAL</b>		<b>492877.7</b>		<b>461344.49</b>		<b>17554.84</b>	<b>37778.4</b>	<b>461722.33</b>



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX B - Shallow Draft Navigation Projects Not  
Subject to the Inland Waterway Fuel Tax,  
Navigation Cost Recovery Analysis by Segment,  
O&M Expenditures for FY 1996 (Actual).**

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DWY DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVER AMOUNT	TYPE	CWIS NO
1	MINNESOTA RIVER MN	NCS	264.03	264.03	0.00	0.00	264.03	SINGLE PUR NAV	11310
1	DAVENPORT SMALL BOAT HBR	NCR	4.94	4.94	0.00	0.00	4.94	SINGLE PUR NAV	74041
1	ANDALUSIA HBR, IL	NCR	42.07	42.07	0.00	0.00	42.07	SINGLE PUR NAV	74228
1	MUSCATINE HBR	NCS	16.00	16.00	0.00	0.00	16.00	SINGLE PUR NAV	74251
1	ST. PAUL SML BT HBR, MN	NCS	45.00	45.00	0.00	0.00	45.00	SINGLE PUR NAV	88887
1	RED WING COMMERCIAL HBR	NCS	16.84	16.84	0.00	0.00	16.84	SINGLE PUR NAV	88809
1	WINONA SMALL BOAT HBR	NCS	23.00	23.00	0.00	0.00	23.00	SINGLE PUR NAV	88816
1	ROCK ISLAND SM BOAT HARBOR	NCR	65.97	65.97	0.00	0.00	65.97	SINGLE PUR NAV	88825
1	FORT MADISON HABOR, IA	NCR	72.21	72.21	0.00	0.00	72.21	SINGLE PUR NAV	88828
			550.96	550.96	0.00	0.00	550.96		
2	SOUTHEAST TWO PORTS, MS, MO	LMS	271.45	271.45	0.00	0.00	271.45	SINGLE PUR NAV	87404
2			271.45	271.45	0.00	0.00	271.45		
3	MOUHT OF YAZOO RIVER, MS	LMK	147.31	147.31	0.00	0.00	147.31	SINGLE PUR NAV	493
3	HELENA HBR AR	LMM	217.92	217.92	0.00	0.00	217.92	SINGLE PUR NAV	7440
3	HELENA HBR AR	LMM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	7440
3	LAKE PROVIDENCE HBR LA	LMK	203.92	203.92	0.00	0.00	203.92	SINGLE PUR NAV	9360
3	OSCEOLA HBR AR	LMM	408.32	408.32	0.00	0.00	408.32	SINGLE PUR NAV	13430
3	WOLF RVR HBR TN	LMM	314.59	314.59	0.00	0.00	314.59	SINGLE PUR NAV	20150
3	YAZOO RIVER MS	LMK	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	20350
3	STAHR HBR, HICKMAN PORT	LMM	302.37	302.37	0.00	0.00	302.37	SINGLE PUR NAV	22020
3	NEW MADRID HBR MO	LMM	167.69	167.69	0.00	0.00	167.69	SINGLE PUR NAV	33012
3	ROSEDALE HBR MS	LMK	142.44	142.44	0.00	0.00	142.44	SINGLE PUR NAV	87072
3	CARTHERSVILLE HBR MO	LMM	155.10	155.10	0.00	0.00	155.10	SINGLE PUR NAV	87092

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY**  
**FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	BWV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OFFICE ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
3	MADISON PARISH PORT	LMK	40.00	40.00	0.00	0.00	40.00	SINGLE PUR NAV	87168
3	CLAIBORNE CO PORT MS	LMK	133.50	133.50	0.00	0.00	133.50	SINGLE PUR NAV	87249
3	YELLOW BEND PORT, AR	LMK	31.63	31.63	0.00	0.00	31.63	SINGLE PUR NAV	87282
3	MR&T-MICKELLER LK HBR	LMV	1930.00	1930.00	0.00	0.00	1930.00	SINGLE PUR NAV	99981
3	MR&T-GREENVILLE HBR	LMV	170.00	170.00	0.00	0.00	170.00	SINGLE PUR NAV	99982
3	MR&T-VICKSBURG HBR	LMV	209.00	209.00	0.00	0.00	209.00	SINGLE PUR NAV	99983
3	MR&T-BATON ROUGE HBR	LMV	405.00	405.00	0.00	0.00	405.00	SINGLE PUR NAV	99984
			4974.79	4974.79	0.00	0.00	4974.79		
4	BAYOU SEINETTE WWY, LA	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	24
4	MISS R OUTLT'S VENICE LA	LMN	1870.38	1870.38	0.00	0.00	1870.38	SINGLE PUR NAV	63
4	WW IWW TO BAYOU DULAC LA	LMN	18.52	18.52	0.00	0.00	18.52	SINGLE PUR NAV	188
4	TICKFAW & NATALBANY	LMN	1.40	1.40	0.00	0.00	1.40	SINGLE PUR NAV	201
4	WW FM EMPIRE TO GULF LA	LMN	63.23	63.23	0.00	0.00	63.23	SINGLE PUR NAV	202
4	BARATARIA BAY WW LA	LMN	2141.88	2141.88	0.00	0.00	2141.88	SINGLE PUR NAV	900
4	BAYOU TECH LA	LMN	173.77	173.77	0.00	0.00	173.77	SINGLE PUR NAV	1150
4	BAYOU TECH VERMILLION R LA	LMN	58.58	58.58	0.00	0.00	58.58	SINGLE PUR NAV	1160
4	BENBROOK LAKE TX	SWF	1733.20	117.30	1615.90	0.00	117.30	MULTI W ALLOC	1350
4	BYU LAFOURCHE & JUMP WW,LA	LMN	8.66	8.66	0.00	0.00	8.66	SINGLE PUR NAV	2310
4	CEDAR BAYOU TX	SWG	626.82	626.82	0.00	0.00	626.82	SINGLE PUR NAV	2810
4	FRESHWATER BAYOU LA	LMN	1664.40	1664.40	0.00	0.00	1664.40	SINGLE PUR NAV	6200
4	GRAPEVINE LAKE TX	SWF	1950.00	19.90	1930.10	0.00	19.90	MULTI W ALLOC	6760
4	TRINITY RIVER, TX	SWG	701.70	701.70	0.00	0.00	701.70	SINGLE PUR NAV	18510
4	PETIT ANSE,TIGRE,CARLIN BY	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	22390
			1612.54	7166.54	3446.80	0.00	7166.54		

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DISI	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT ACCOUNT	RECOVERED USE	RECOVERED TYPE	SEG NO
5	BAYOU LACOMBE	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	158
5	APALACHICOLA BAY FL	SAM	93.33	93.33	0.00	0.00	93.33	SINGLE PUR NAV	430
5	JOHNS PASS, PINELLAS, FL	SAJ	56.15	56.15	0.00	0.00	56.15	SINGLE PUR NAV	1001
5	BILOXI HBR MS	SAM	284.01	284.01	0.00	0.00	284.01	SINGLE PUR NAV	1520
5	IWW CLCHEER TO ANLTE RF	SAJ	60.68	60.68	0.00	0.00	60.68	SINGLE PUR NAV	2480
5	CLEARWATER PASS FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	3400
5	DAUPHIN ISLE BAY AL	SAM	250.15	250.15	0.00	0.00	250.15	SINGLE PUR NAV	4480
5	EAST PASS CHANNEL FL	SAM	1038.91	1038.91	0.00	0.00	1038.91	SINGLE PUR NAV	4980
5	ESCAMBIA-CONECUH RV FL AL	SAM	0.20	0.20	0.00	0.00	0.20	SINGLE PUR NAV	5620
5	FLY CREEK AL	SAM	102.11	102.11	0.00	0.00	102.11	SINGLE PUR NAV	5970
5	FORT MYERS BEACH FL	SAJ	0.50	0.50	0.00	0.00	0.50	SINGLE PUR NAV	6220
5	PANACEA HBR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	7510
5	LA GRANGE BAYOU FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	9280
5	CH. NAPLES-BIG MARCO FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	12150
5	OKEECHOBEE WWY, FL	SAJ	4649.20	3765.20	884.00	0.00	3765.20	SINGLE PUR NAV	13240
5	PERDIDO PASS CH AL	SAM	30.41	30.41	0.00	0.00	30.41	SINGLE PUR NAV	13880
5	TANGIPHOHOA RV LA	LMN	57.32	57.32	0.00	0.00	57.32	SINGLE PUR NAV	17970
5	WOLF & JORDAN RVRS, MS	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	20160
5	CADET BAYOU, MS	SAM	301.33	301.33	0.00	0.00	301.33	SINGLE PUR NAV	20600
5	DOG AND FOWL RIVERS, AL	SAM	676.10	676.10	0.00	0.00	676.10	SINGLE PUR NAV	20710
5	LONGBOAT PASS FL	SAJ	10.94	10.94	0.00	0.00	10.94	SINGLE PUR NAV	23100
5	BLACKWATER RVR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	23230
5	SUWANEE RIVER, FL	SAJ	0.13	0.13	0.00	0.00	0.13	SINGLE PUR NAV	74391
5	WITHLACOOCHIE RIVER	SAJ	38.46	38.46	0.00	0.00	38.46	SINGLE PUR NAV	74393

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY**  
**FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	TOTAL USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
5	ANCLOTE RIVER, FL	SAJ	4.02	4.02	0.00	0.00	4.02	SINGLE PUR NAV	74478
5	NEW PASS SARASOTA FL	SAJ	95.27	95.27	0.00	0.00	95.27	SINGLE PUR NAV	74483
5	CRYSTAL RIVER, FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	74488
5	HORSESHOE COVE, FL	SAJ	99.04	99.04	0.00	0.00	99.04	SINGLE PUR NAV	74495
5	STEINHATCHEE RIVER, FL	SAJ	-0.70	-0.70	0.00	0.00	-0.70	SINGLE PUR NAV	74508
5	BAYOU CODEN AL	SAM	12.31	12.31	0.00	0.00	12.31	SINGLE PUR NAV	74520
5	ST MARKS R FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	74542
5	PASS CHRISTIAN HBR MS	SAM	66.59	66.59	0.00	0.00	66.59	SINGLE PUR NAV	74564
5	BON SECOUR RVR AL	SAM	35.48	35.48	0.00	0.00	35.48	SINGLE PUR NAV	76060
5	CEDAR ISLAND KEATON BCH FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	87215
5			7361.94	7377.94	0.00	0.00	7377.94		
13	LICKING RIVER OPEN CHANNEL	ORL	10.66	10.66	0.00	0.00	10.66	SINGLE PUR NAV	10220
13	PORTSMOUTH HARBOR	ORH	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	10221
13	BIG SANDY HARBOR	ORH	1060.34	1060.34	0.00	0.00	1060.34	SINGLE PUR NAV	10222
13	ELK RIVER HARBOR	ORH	0.60	0.60	0.00	0.00	0.60	SINGLE PUR NAV	88833
13			1071.60	1071.60	0.00	0.00	1071.60		
20	CADDY LAKE LA TX	LMK	127.50	0.00	62.90	64.60	64.60	MULTI WO ALLOC	2330
20			127.50	0.00	62.90	64.60	64.60		
24	IRONDEQUOIT BAY, NY	NCB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	8220
24	OAK ORCHARD HBR NY	NCB	0.18	0.18	0.00	0.00	0.18	SINGLE PUR NAV	12980
24	OLCOTT HBR NY	NCB	4.23	4.23	0.00	0.00	4.23	SINGLE PUR NAV	44066
24	WILSON HBR NY	NCB	0.23	0.23	0.00	0.00	0.23	SINGLE PUR NAV	73938

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY**  
**FUEL TAX- NAVIGATION AND COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC		OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWS No
				NCB	0.00					
24	WEST HBR, OH		4.64	4.64	0.00	0.00	0.00	0.00	SINGLE PUR NAV	74025
24								4.64		
25	CLINTON RIV MI	NCB	2.95	2.95	0.00	0.00	0.00	2.95	SINGLE PUR NAV	3490
25	PORT CLINTON HBR OH	NCB	0.00	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	21540
25	VERMILLION HBR OH	NCB	158.71	158.71	0.00	0.00	0.00	158.71	SINGLE PUR NAV	44003
25	ROCKY R HBR OH	NCB	62.45	62.45	0.00	0.00	0.00	62.45	SINGLE PUR NAV	44072
25	CATTARAUGUS CRK NY	NCB	5.50	5.50	0.00	0.00	0.00	5.50	SINGLE PUR NAV	73920
25	STURGEON POINT, NY	NCB	66.40	66.40	0.00	0.00	0.00	66.40	SINGLE PUR NAV	87433
25	BOLLES HARBOR MI	NCE	29.58	29.58	0.00	0.00	0.00	29.58	SINGLE PUR NAV	87750
25			325.69	325.69	0.00	0.00	0.00	325.69		
26	PT LOOKOUT HBR MI	NCE	2.38	2.38	0.00	0.00	0.00	2.38	SINGLE PUR NAV	14220
26	PORT SANILAC HBR MITS RD	NCE	61.26	61.26	0.00	0.00	0.00	61.26	SINGLE PUR NAV	14410
26	PORT SANILAC HBR MI	NCE	137.50	137.50	0.00	0.00	0.00	137.50	SINGLE PUR NAV	46039
26	INLAND ROUTE MICHIGAN	NCE	38.18	38.18	0.00	0.00	0.00	38.18	SINGLE PUR NAV	48140
26	HARRISVILLE HARBOR MI	NCE	-0.40	-0.40	0.00	0.00	0.00	-0.40	SINGLE PUR NAV	53550
26	LEXINGTON HBR MITS RD	NCE	97.00	97.00	0.00	0.00	0.00	97.00	SINGLE PUR NAV	73909
26	LEXINGTON HARBOR MI	NCE	178.32	178.32	0.00	0.00	0.00	178.32	SINGLE PUR NAV	74006
26	TAWAS BAY HARBOR, MI	NCE	0.90	0.90	0.00	0.00	0.00	0.90	SINGLE PUR NAV	74019
26	CASEVILLE HARBOR MI	NCE	221.72	221.72	0.00	0.00	0.00	221.72	SINGLE PUR NAV	74199
26	HAMMOND BAY HBR MI	NCE	0.14	0.14	0.00	0.00	0.00	0.14	SINGLE PUR NAV	74208
26	PT AUSTIN HBR MI	NCE	0.13	0.13	0.00	0.00	0.00	0.13	SINGLE PUR NAV	74213
26	SEBEWAING RIVER MI	NCE	467.91	467.91	0.00	0.00	0.00	467.91	SINGLE PUR NAV	76061
26	BAY PORT HARBOR, MI	NCE	0.43	0.43	0.00	0.00	0.00	0.43	SINGLE PUR NAV	76062

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY**  
**FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC			RECOVERY AMOUNT	PROJECT TYPE	CWS NC
				OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT			
26			1265.47	1265.47	0.00	0.00	1265.47		
27	BIG SUAMICO HARBOR	NCE	0.20	0.20	0.00	0.00	0.20	SINGLE PUR NAV	612
27	NEW BUFFALO HBR MI	NCE	359.89	359.89	0.00	0.00	359.89	SINGLE PUR NAV	1020
27	FOX RIVER WI	NCE	2117.30	2117.30	0.00	0.00	2117.30	SINGLE PUR NAV	6610
27	GRAND TRAVERSE HBR MI	NCE	3.57	3.57	0.00	0.00	3.57	SINGLE PUR NAV	6730
27	LAKE MICHIGAN DIVERSION, IL	NCC	406.31	406.31	0.00	0.00	406.31	SINGLE PUR NAV	8218
27	SAUGATUCK HBR MI	NCE	220.81	220.81	0.00	0.00	220.81	SINGLE PUR NAV	16390
27	SOUTH HAVEN HBR MI	NCE	1.70	1.70	0.00	0.00	1.70	SINGLE PUR NAV	17180
27	SOUTH HAVEN HBR MIT SHR DM	NCE	0.04	0.04	0.00	0.00	0.04	SINGLE PUR NAV	17181
27	LELAND HBR MI	NCE	288.80	288.80	0.00	0.00	288.80	SINGLE PUR NAV	46018
27	ARCADIA HBR MI	NCE	124.33	124.33	0.00	0.00	124.33	SINGLE PUR NAV	46063
27	GRELICKVILLE HARBOR, MI	NCE	18.67	18.67	0.00	0.00	18.67	SINGLE PUR NAV	46103
27	ALGOMA HARBOR WI	NCE	205.74	205.74	0.00	0.00	205.74	SINGLE PUR NAV	74177
27	PENSAUKEE HBR WI	NCE	0.03	0.03	0.00	0.00	0.03	SINGLE PUR NAV	74189
27	BURNS WATER WAY SBH	NCC	137.50	137.50	0.00	0.00	137.50	SINGLE PUR NAV	87387
			3684.88	3684.88	0.66	0.66	3684.88		
28	BIG BAY HBR MI	NCE	0.50	0.50	0.00	0.00	0.50	SINGLE PUR NAV	1410
28	BLACK R UPR PEN	NCE	1.24	1.24	0.00	0.00	1.24	SINGLE PUR NAV	1640
28	CORNUCOPIA HBR WI	NCE	4.98	4.98	0.00	0.00	4.98	SINGLE PUR NAV	3970
28	LAC LA BELLE HBR MI	NCE	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	9210
28	LITTLE LAKE HBR MI	NCE	69.24	69.24	0.00	0.00	69.24	SINGLE PUR NAV	9890
28	SAXON HBR WI	NCE	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	16500
28	EAGLE HBR MI	NCE	4.00	4.00	0.00	0.00	4.00	SINGLE PUR NAV	22870

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROTECT TYPE	CWIS No
28	WARROAD HBR MN	NCS	233.46	233.46	0.00	0.00	233.46	SINGLE PUR NAV	48011
28	ZIPPEL BAY SM BOAT HBR, MN	NCS	0.06	0.06	0.00	0.00	0.06	SINGLE PUR NAV	87343
28			313.52	313.48	0.00	0.00	313.48		
29	GUILFORD HBR CT	NED	0.19	0.19	0.00	0.00	0.19	SINGLE PUR NAV	231
29	CRIEHAVEN HBR ME	NED	79.13	79.13	0.00	0.00	79.13	SINGLE PUR NAV	339
29	UNION RIVER,ME	NED	19.99	19.99	0.00	0.00	199.99	SINGLE PUR NAV	387
29	CUTTYHUNK HBR MA	NED	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	409
29	HYANNIS HBR MA	NED	53.00	53.00	0.00	0.00	53.00	SINGLE PUR NAV	421
29	ROCKPORT HBR MA	NED	6.15	6.15	0.00	0.00	6.15	SINGLE PUR NAV	438
29	WELLFLEET HBR MA	NED	-0.08	-0.08	0.00	0.00	-0.08	SINGLE PUR NAV	452
29	LITTLE HARBOR, NH	NED	22.82	22.82	0.00	0.00	22.82	SINGLE PUR NAV	509
29	BULLOCKS PT CVE RI	NED	-8.80	-8.80	0.00	0.00	-8.80	SINGLE PUR NAV	556
29	LITTLE NARRAGANSETT BAY	NED	174.95	174.95	0.00	0.00	174.95	SINGLE PUR NAV	562
29	BROAD CREEK VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	582
29	CRANES CREEK VA	NAO	119.95	119.95	0.00	0.00	119.95	SINGLE PUR NAV	585
29	MONROE BAY CK VA	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	592
29	WHITINGS CREEK, MIDDLE	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	605
29	GREENVALE CK, LANE CO, VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	780
29	QUEENS CREEK VA	NAO	161.68	161.68	0.00	0.00	161.68	SINGLE PUR NAV	795
29	BARNEGAT INLET NJ	NAP	1211.58	1211.58	0.00	0.00	1211.58	SINGLE PUR NAV	950
29	COHANSEY RIVER NJ	NAP	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	3540
29	COHASSET HBR MA	NED	16.89	16.89	0.00	0.00	16.89	SINGLE PUR NAV	3560
29	DUXBURY HBR MA	NED	763.90	763.90	0.00	0.00	763.90	SINGLE PUR NAV	5080
29	E ROCKAWAY INLET NY	NAN	2733.54	2733.54	0.00	0.00	2733.54	SINGLE PUR NAV	5220

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATIONS AND COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	BIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
29	CHINCOTEAGUE HBR RFG VA	NAO	9.99	9.99	0.00	0.00	9.99	SINGLE PUR NAV	5841
29	FIRE INLET TO JONES NY	NAN	250.17	250.17	0.00	0.00	250.17	MULTI TWO ALLOC	5880
29	FIVE MILE RIVER, CT	NED	117.90	117.90	0.00	0.00	117.90	SINGLE PUR NAV	5910
29	GREEN HBR MA	NED	229.08	229.08	0.00	0.00	229.08	SINGLE PUR NAV	6920
29	INDIAN RVR INLET BAY DEL	NAP	477.72	477.72	0.00	0.00	477.72	SINGLE PUR NAV	8110
29	IWW REHOBOTH BAY TO DELA	NAP	154.23	154.23	0.00	0.00	154.23	SINGLE PUR NAV	8170
29	IWW IWW	NAP	2507.44	2507.44	0.00	0.00	2507.44	SINGLE PUR NAV	8190
29	SESUIT HBR	NED	132.59	132.59	0.00	0.00	132.59	SINGLE PUR NAV	8193
29	KENNEBUNK RVR ME	NED	35.84	35.84	0.00	0.00	35.84	SINGLE PUR NAV	8900
29	KEYPORT HBR NJ	NAN	0.49	0.49	0.00	0.00	0.49	SINGLE PUR NAV	8980
29	LAKE MONTAUK HBR NY	NAN	960.53	960.53	0.00	0.00	960.53	SINGLE PUR NAV	9340
29	LITTLE WICOMICO RVR VA	NAB	37.00	37.00	0.00	0.00	37.00	SINGLE PUR NAV	9980
29	LYNNHAVEN INLET VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	10310
29	MATAWAN CREEK NJ	NAN	0.80	0.80	0.00	0.00	0.80	SINGLE PUR NAV	10410
29	MANASQUAN RVR NJ	NAP	324.94	324.94	0.00	0.00	324.94	SINGLE PUR NAV	10450
29	CHINCOTEAGUE BAY VA	NAO	11.73	11.73	0.00	0.00	11.73	SINGLE PUR NAV	10890
29	MILTON HBR NY	NAN	0.03	0.03	0.00	0.00	0.03	SINGLE PUR NAV	11250
29	MURDERKILL RVR	NAP	39.19	39.19	0.00	0.00	39.19	SINGLE PUR NAV	12020
29	NRWS LKE CHAMPLAIN NY VT	NAN	46.33	46.33	0.00	0.00	46.33	SINGLE PUR NAV	12200
29	QUINBY CRK VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	14770
29	RAPPAHANNOCK R VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	14850
29	ROYAL RVR ME	NED	194.84	194.84	0.00	0.00	194.84	SINGLE PUR NAV	15640
29	SACO RVR ME	NED	0.19	0.19	0.00	0.00	0.19	SINGLE PUR NAV	15860
29	SHREWSBURY RVR NJ	NAN	611.26	611.26	0.00	0.00	611.26	SINGLE PUR NAV	16780
29	TUCKERTON CREEK	NAP	5.83	5.83	0.00	0.00	5.83	SINGLE PUR NAV	18580

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY**  
**FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC-SPEC	OTHER ALLOC-SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
29	WW COAST OF VA	NAO	1371.59	1371.59	0.00	0.00	1371.59	SINGLE PUR NAV	19550
29	HOSKINS CREEK, VA	NAO	324.79	324.79	0.00	0.00	324.79	SINGLE PUR NAV	20920
29	NEWPORT NEWS CREEK	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	21640
29	SCARBORO RIVER, ME	NED	36.24	36.24	0.00	0.00	36.24	SINGLE PUR NAV	21800
29	HONGAR TAR BAY MD	NAB	715.48	715.48	0.00	0.00	715.48	SINGLE PUR NAV	22690
29	NORTHEAST RVR MD	NAB	27.74	27.74	0.00	0.00	27.74	SINGLE PUR NAV	27009
29	BLACKWATER RIVER, VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	27028
29	TANGIER CHANNEL VA	NAO	529.10	529.10	0.00	0.00	529.10	SINGLE PUR NAV	27650
29	APPOMATTOX RIVER VA	NAO	54.81	54.81	0.00	0.00	54.81	SINGLE PUR NAV	30580
29	CHATTHAM HBR MA	NED	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	39001
29	NEWBURYPORT HBR MA	NED	338.83	338.83	0.00	0.00	338.83	SINGLE PUR NAV	39018
29	WELLS HBR ME	NED	32.17	32.17	0.00	0.00	32.17	SINGLE PUR NAV	39023
29	JOSIAS R ME	NED	1.91	1.91	0.00	0.00	1.91	SINGLE PUR NAV	39054
29	HAMPTON HBR NH	NED	3.05	3.05	0.00	0.00	3.05	SINGLE PUR NAV	39063
29	SCITUATE HARBOR, MA	NED	438.69	438.69	0.00	0.00	438.69	SINGLE PUR NAV	39065
29	MUDDY HOOK/TYLER COVES MD	NAB	9.47	9.47	0.00	0.00	9.47	SINGLE PUR NAV	40025
29	TLIGHMAN IS HBR MD	NAB	36.83	36.83	0.00	0.00	36.83	SINGLE PUR NAV	40108
29	WESTCHESTER CK NY	NAN	39.94	39.94	0.00	0.00	39.94	SINGLE PUR NAV	41003
29	EAST CHESTER CRK NY	NAN	39.63	39.63	0.00	0.00	39.63	SINGLE PUR NAV	41004
29	JONES INLT NY	NAN	4620.10	4620.10	0.00	0.00	4620.10	SINGLE PUR NAV	41006
29	SHARK RVR NJ	NAN	70.41	70.41	0.00	0.00	70.41	SINGLE PUR NAV	41007
29	BROWN CK NY	NAN	0.33	0.33	0.00	0.00	0.33	SINGLE PUR NAV	41022
29	SHOAL HBR CMPTN CK NJ	NAN	113.39	113.39	0.00	0.00	113.39	SINGLE PUR NAV	41035
29	BRONX RVR NY	NAN	39.33	39.33	0.00	0.00	39.33	SINGLE PUR NAV	41057
29	MATTITUCK HBR NY	NAN	1003.18	1003.18	0.00	0.00	1003.18	SINGLE PUR NAV	41082

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
29	STARLINGS CREEK VA	NAO	244.28	244.28	0.00	0.00	244.28	SINGLE PUR NAV	42001
29	CRISFIELD HBR MD	NAB	35.54	35.54	0.00	0.00	35.54	SINGLE PUR NAV	51950
29	HERRING CK TALL TIMBERS MD	NAB	35.73	35.73	0.00	0.00	35.73	SINGLE PUR NAV	62011
29	YORK HARBOR, ME	NED	585.59	585.59	0.00	0.00	585.59	SINGLE PUR NAV	72501
29	NEABSCO CK VA	NAB	35.85	35.85	0.00	0.00	35.85	SINGLE PUR NAV	73542
29	NANTICOKE RV DE MD	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73549
29	BROAD CK MD	NAB	139.83	139.83	0.00	0.00	139.83	SINGLE PUR NAV	73554
29	CHESTER RVR MD	NAB	63.45	63.45	0.00	0.00	63.45	SINGLE PUR NAV	73557
29	NANTICOKE AT NANTICOKE	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73564
29	OCEAN CITY HBR SNPXENT BY	NAB	125.28	125.28	0.00	0.00	125.28	SINGLE PUR NAV	73567
29	POCOMOKE RIVER MD	NAB	0.57	0.57	0.00	0.00	0.57	SINGLE PUR NAV	73570
29	RHODES PT TO TYLERTON MD	NAB	-38.95	-38.95	0.00	0.00	-38.95	SINGLE PUR NAV	73574
29	FISHING BAY MD	NAB	67.34	67.34	0.00	0.00	67.34	SINGLE PUR NAV	73583
29	FISHING CK MD	NAB	20.21	20.21	0.00	0.00	20.21	SINGLE PUR NAV	73584
29	HERRING B ROCKHD CK MD	NAB	0.10	0.10	0.00	0.00	0.10	SINGLE PUR NAV	73585
29	ISLAND CK ST. GEO IS MD	NAB	0.91	0.91	0.00	0.00	0.91	SINGLE PUR NAV	73588
29	KNAPPS NARROWS	NAB	404.50	404.50	0.00	0.00	404.50	SINGLE PUR NAV	73589
29	TRED AVON RVR MD	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73600
29	TWITCH CV THOROFARE R MD	NAB	115.05	115.05	0.00	0.00	115.05	SINGLE PUR NAV	73602
29	WICOMICO RVR MD	NAB	123.46	123.46	0.00	0.00	123.46	SINGLE PUR NAV	73606
29	ANACOSTIA RVR BASIN DC	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	73608
29	CHEESEQUAKE CREEK, NJ	NAN	10.80	10.80	0.00	0.00	10.80	SINGLE PUR NAV	73626
29	SHINNECOCK INLET NY	NAN	49.75	49.75	0.00	0.00	49.75	SINGLE PUR NAV	73644
29	GLEN COVE CRK NY	NAN	437.74	437.74	0.00	0.00	437.74	SINGLE PUR NAV	73686
29	RONDOUT HARBOR NY	NAN	0.23	0.23	0.00	0.00	0.23	SINGLE PUR NAV	73705

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATIONS COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOCATED		OTHER ALLOCATED SPEC	JOIN RECOVERY USE	COST RECOVERY TYPE	COST RECOVERY AMOUNT	COST RECOVERY NO
				NAV	NON- NAV					
29	BURLINGTON HARBOR, VT	NAN	0.49	0.49	0.00		0.00	SINGLE PUR NAV	0.49	73727
29	PORT CHESTER HBR NY	NAN	44.60	44.60	0.00		0.00	SINGLE PUR NAV	44.60	73747
29	HORN HARBOR, VA	NAO	9.26	9.26	0.00		0.00	SINGLE PUR NAV	9.26	73776
29	LAFAYETTE RIVER, VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73778
29	NANSEMOND RIVER VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73784
29	NOTTOWAY RIVER	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73789
29	OYSTER CREEK VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73792
29	PAGAN RIVER, VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73793
29	WILLOUGHBY CHANNEL, VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73801
29	WINTER HARBOR VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73802
29	MAURICE RIVER NJ	NAP	617.93	617.93	0.00		0.00	SINGLE PUR NAV	617.93	73841
29	MISPLILLION RVR DEL	NAP	-2.17	-2.17	0.00		0.00	SINGLE PUR NAV	-2.17	73857
29	RACCOON CRK NJ	NAP	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	73892
29	TOMS RIVER, NJ	NAP	1.68	1.68	0.00		0.00	SINGLE PUR NAV	1.68	73894
29	DEEP CR NEWPORT NEWS VA	NAO	594.47	594.47	0.00		0.00	SINGLE PUR NAV	594.47	75117
29	PARKER CREEK, VA	NAO	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	76011
29	STONY CRK BRANFORD CONN	NED	0.18	0.18	0.00		0.00	SINGLE PUR NAV	0.18	76064
29	CHINCOTEAGUE INLET VA	NAO	816.45	816.45	0.00		0.00	SINGLE PUR NAV	816.45	76106
29	TYLERS BEACH VA	NAO	32.09	32.09	0.00		0.00	SINGLE PUR NAV	32.09	76107
29	PATCHOGUE RVR RI CONN	NED	6.52	6.52	0.00		0.00	SINGLE PUR NAV	6.52	87008
29	ANDREWS RVR MA	NED	-0.62	-0.62	0.00		0.00	SINGLE PUR NAV	-0.62	87009
29	CEDAR CREEK	NAP	0.00	0.00	0.00		0.00	SINGLE PUR NAV	0.00	87211
29	RUDEE INLET, VIRGINIA	NAO	442.73	442.73	0.00		0.00	SINGLE PUR NAV	442.73	87455
29	SHALLOW CREEK, MD	NAB	25.00	25.00	0.00		0.00	SINGLE PUR NAV	25.00	87544
			26395.88	26395.88	0.00		0.00		26395.88	

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

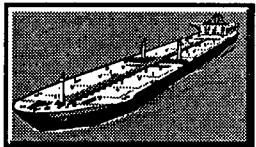
SEG NO.	PROJECT NAME	DIV DIST	NAVIGATION ALLOC SPEC	OTHER ALLOC SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWS NO.
		TOTAL						
30	TOWN CK, SC	SAC	393.92	393.92	0.00	0.00	393.92	1
30	BELHAVEN HBR NC	SAW	40.37	40.37	0.00	0.00	40.37	1290
30	THURMOND DAM & RES	SAS	8571.10	193.90	8377.20	0.00	193.90	3350
30	CROSS FLA BARGE CANAL FL	SAJ	22.71	22.71	0.00	0.00	22.71	SINGLE PUR NAV
30	HARTWELL GA, SC	SAS	8580.20	117.30	8462.90	0.00	117.30	MULTI W ALLOC
30	LITTLE RIVER INLET SC	SAC	26.65	26.65	0.00	0.00	26.65	SINGLE PUR NAV
30	LOCKWD FOLLY R NC	SAW	658.73	658.73	0.00	0.00	658.73	SINGLE PUR NAV
30	MANTEO BAY NC	SAW	3309.61	3309.61	0.00	0.00	3309.61	SINGLE PUR NAV
30	MURRELLS INLET SC	SAC	40.01	40.01	0.00	0.00	40.01	SINGLE PUR NAV
30	OKLAWAHA RIVER FL	SAJ	125.48	125.48	0.00	0.00	125.48	SINGLE PUR NAV
30	PONCE DE LEON INLET FL	SAJ	245.93	245.93	0.00	0.00	245.93	SINGLE PUR NAV
30	ROLLINSON CH NC	SAW	0.31	0.31	0.00	0.00	0.31	SINGLE PUR NAV
30	SAY R BELOW AUGUSTA GA SC	SAS	1677.66	1677.66	0.00	0.00	1677.66	SINGLE PUR NAV
30	SILVER LKE HBR NC	SAW	45.44	45.44	0.00	0.00	45.44	SINGLE PUR NAV
30	ST. LUCIE INLET FL	SAJ	510.53	510.53	0.00	0.00	510.53	SINGLE PUR NAV
30	MELBOURNE HBR FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
30	ROANOKE RVR NC	SAW	78.00	78.00	0.00	0.00	78.00	SINGLE PUR NAV
30	DRUM INLET NC	SAW	72.06	72.06	0.00	0.00	72.06	SINGLE PUR NAV
30	CHOWAN R NC	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
30	ST. JOHNS R TO LK HRVY FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
30	BAKERS HAULORR INLT FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
30	EAU GALLIE HBR FL	SAJ	2.33	2.33	0.00	0.00	2.33	SINGLE PUR NAV
30	PAMILICO & TAR R NC	SAW	132.34	132.34	0.00	0.00	132.34	SINGLE PUR NAV
30	WW CONN PAMIL SD BEAU HB	SAW	12.71	12.71	0.00	0.00	12.71	SINGLE PUR NAV

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG No.	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS No.
30	ST AUGUSTINE HBR FL	SAJ	3192.12	3192.12	0.00	0.00	3192.12	SINGLE PUR NAV	75027
30	FOLLY RVR SC	SAC	252.12	252.12	0.00	0.00	252.12	SINGLE PUR NAV	87088
30	BROOKGREEN GARDEN CANAL	SAC	0.02	0.02	0.00	0.00	0.02	SINGLE PUR NAV	87533
30	JEREMY CREEK SC	SAC	0.02	0.02	0.00	0.00	0.02	SINGLE PUR NAV	88855
31	SWINOMISH CHANNEL	NPS	2788.37	1150.27	16846.16	1.00	1150.27	SINGLE PUR NAV	17870
31			6.73	6.73	6.68	0.00	6.73	SINGLE PUR NAV	6.73
32	COLUMBIA R BAKER BAY	NPP	1.60	1.60	0.00	0.00	1.60	SINGLE PUR NAV	3570
32	COLUM. R. BTN CHNK SD IS	NPP	1037.17	1037.17	0.00	0.00	1037.17	SINGLE PUR NAV	23080
32			1038.77	1038.77	0.00	0.00	1038.77	SINGLE PUR NAV	1038.77
33	CHETCO RIVER	NPP	463.98	463.98	0.00	0.00	463.98	SINGLE PUR NAV	3130
33	COQUILLE R OR	NPP	160.93	160.93	0.00	0.00	160.93	SINGLE PUR NAV	3900
33	DEPOE BAY OR	NPP	39.37	39.37	0.00	0.00	39.37	SINGLE PUR NAV	4610
33	NOYO RVR HBR CA	SPN	7.08	7.08	0.00	0.00	7.08	SINGLE PUR NAV	12940
33	QUILLAYUTE RIVER	NPS	4373.19	4373.19	0.00	0.00	4373.19	SINGLE PUR NAV	15600
33	ROGUE RVR HBR GOLD BH	NPP	998.18	998.18	0.00	0.00	998.18	SINGLE PUR NAV	20300
33	YAQUINA RVR OR	NPP	328.10	328.10	0.00	0.00	328.10	SINGLE PUR NAV	74701
33	HALF MOON BAY/PILAR PT HBR	SPN	87.00	87.00	0.00	0.00	87.00	SINGLE PUR NAV	8187
33			6457.83	6457.83	0.00	0.00	6457.83	SINGLE PUR NAV	345.60
34	SACRAMENTO RVR CA	SPK	223.56	223.56	0.00	0.00	223.56	SINGLE PUR NAV	13940
34	PETALUMA RVR CA	SPN	345.60	345.60	0.00	0.00	345.60	SINGLE PUR NAV	13940

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
34	SACRAMENTO RVR DEBRIS CTRL	SPK	754.45	309.45	45.00	0.00	309.45	SINGLE PUR NAV	15810
34	YUBA RIVER DEBRIS TREAT CA	SPK	14.29	14.29	0.00	0.00	14.29	SINGLE PUR NAV	20410
34	S RAFAEL CK CA	SPN	0.66	0.66	0.00	0.00	0.66	SINGLE PUR NAV	74709
34			1338.56	853.56	45.00	0.00	853.56		
35	DILLINGHAM HBR AK	NPA	362.07	362.07	0.00	0.00	362.07	SINGLE PUR NAV	4800
35	NOME HBR AK	NPA	523.40	523.40	0.00	0.00	523.40	SINGLE PUR NAV	72742
35			885.47	885.47	0.00	0.00	885.47		
36	CANNK-NINILCHIK HARBOR	NPA	171.62	171.62	0.00	0.00	171.62	SINGLE PUR NAV	12640
36	VALDEZ HBR AK	NPA	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	72849
37	DOUGLAS HBR AK	NPA	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV	72789
36			171.62	171.62	0.00	0.00	171.62		
37	DRY PASS AK	NPA	42.23	42.23	0.00	0.00	42.23	SINGLE PUR NAV	72791
37			42.23	42.23	0.00	0.00	42.23		
38	AUNUU HBR AS	POD	65.43	65.43	0.00	0.00	65.43	SINGLE PUR NAV	87036
38	AUASI SBH, AM SAMOA	POD	5.92	5.92	0.00	0.00	5.92	SINGLE PUR NAV	87108
38			71.35	71.35	0.00	0.00	71.35		
GRAND TOTAL			941.09	742.56	217.66	61.60	742.56		



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX C - Shallow Draft Navigation Projects  
Subject to the Inland Waterway Fuel Tax,  
Analysis by Segment, O&M Expenditures  
for FY 1996 (Actual).**

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO.	PROJECT NAME	BIV/ DIST	TOTAL	NAVIGATION ALL SPEC	OTHER ALL SPEC	JOINT USE	NAVIGATION AMOUNT	PROJECT TYPE	CWIS NO.
1	MISS. R. RFB MO R AND MPLS	NCS	3369.42	3369.42	0.00	0.00	3369.42	SINGLE PUR NAV	1053
1	CLARENCE CANNON DAM & RES	LMS	5777.20	2.70	5774.50	0.00	2.70	MULTI W ALLOC	2560
1	MR& MO R BASIN MODEL DEV	LMS	239.78	239.78	0.00	0.00	239.78	MULTI W ALLOC	8249
1	MISS R BTN MO R MNPLS MN	LMS	12271.30	11402.10	869.20	0.00	11402.10	SINGLE PUR NAV	11370
1	MISS R BTN OH/MO R IL	LMS	19772.30	19657.30	115.00	0.00	19557.30	SINGLE PUR NAV	11380
1	MISS R BTW MO R MPLS MN	NCR	35555.50	33245.20	2310.30	0.00	33245.20	SINGLE PUR NAV	11550
1	RES AT HEADWATERS	NCS	3095.10	0.00	1564.50	1530.60	153.06	SINGLE PUR NAV	15200
1	MISS. R. BET MO. AND MNPLS	NCS	41288.60	40179.50	1109.10	0.00	40179.50	SINGLE PUR NAV	74295
			123366.28	108965.08	11742.68	1530.60	10245.08		
2	CARLYLE LAKE, IL	LMS	4731.40	0.00	2676.30	2055.10	205.51	SINGLE PUR NAV	2700
2	KASKASKIA RVR IL	LMS	1831.40	1827.60	3.80	0.00	1827.60	SINGLE PUR NAV	8770
2	LAKE SHELBYVILLE, IL	LMS	5134.00	0.00	2652.90	2181.10	218.11	SINGLE PUR NAV	16691
			11696.80	1827.60	5633.08	4236.20	2251.22		
3	MR&T CHAN IMP MAINT DREDG	LMV	13801.00	13801.00	0.00	0.00	13801.00	MULTI W ALLOC	99991
3	MR&T CHAN IMP CONST DREDG	LMV	0.00	0.00	0.00	0.00	0.00	MULTI W ALLOC	99992
3	MR&T CHAN IMP MAINT DIKES	LMV	1946.00	1946.00	0.00	0.00	1946.00	SINGLE PUR NAV	99993
3	MR&T CHAN IMP CONST DIKES	LMV	15054.00	15054.00	0.00	0.00	15054.00	M R & T	99994
3	MR&T CHAN IMP REVET MAINT	LMV	30545.00	0.00	0.00	0.00	30545.00	M R & T	99995
3	MR&T CHAN IMP REVET CONST	LMV	24647.00	0.00	0.00	0.00	24647.00	M R & T	99996
3	MR&T OLD RIVER MAINT	LMV	3080.00	0.00	0.00	3080.00	1025.64	M R & T	99997
3	MR&T OLD RIVER CONST	LMV	0.00	0.00	0.00	0.00	0.00	M R & T	99998
3	MR&T-ALL OTHER FEATURES	LMV	209738.00	0.00	209738.00	0.00	0.00	M R & T	99999
			298811.00	30801.00	209738.00	33272.00	3025.58		

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGA- TION ALLOC/SEC	OTHER SPEC ALLOC/SEC	JOINT USE	NAVIGA- TION AMOUNT	PROTECT TYPE	CWIS NO
4	GIWW LA	LMN	16777.31	16777.31	0.00	0.00	16777.31	MR & T	62
4	GIWW TX	SWG	12017.63	12017.63	0.00	0.00	12017.63	MR & T	7140
4	GIWW CHAN TO HARLINGEN, TX	SWG	605.34	605.34	0.00	0.00	605.34	MR & T	74817
4	MOUTH OF THE COLORADO RVR	SWG	1491.84	1491.84	0.00	0.00	1491.84	SINGLE PUR NAV	74826
4	CHANNEL TO PORT MANSFIELD	SWG	706.28	706.28	0.00	0.00	706.28	SINGLE PUR NAV	74847
4	CHOCOLATE BAYOU, TX	SWG	34.35	34.35	0.00	0.00	34.35	SINGLE PUR NAV	76085
4	CHANNEL TO VICTORIA, TX	SWG	553.56	553.56	0.00	0.00	553.56	SINGLE PUR NAV	88834
4			32,86.31	32,86.31	0.00	0.00	32,86.31		
5	GIWW-MOBILE DIST AL, MS, FL	SAM	4048.59	4048.59	0.00	0.00	4048.59	4048.59	7130
5			4048.59	4048.59	0.00	0.00	4048.59		
6	APLCH-CHAT-FLINT, FL, AL, GA	SAM	5553.20	5275.60	277.60	0.00	5275.60	SINGLE PUR NAV	410
6	BUFORD DAM GA	SAM	7438.40	82.80	7355.60	0.00	82.80	SINGLE PUR NAV	2190
6	JIM WOODRUFF L D FL GA	SAM	4830.00	1756.10	3073.90	0.00	1756.10	SINGLE PUR NAV	8450
6	W.F. GEORGE L D AL GA	SAM	5291.60	1086.50	4205.10	0.00	1086.50	MULTI W ALLOC	19190
6	WEST PT DAM AL GA	SAM	6066.50	36.90	6029.60	0.00	36.90	MULTI W ALLOC	19710
6			2919.10	4237.90	2094.80	0.00	4237.90		
7	BWT RVR AL	SAM	16648.50	15083.50	1565.00	0.00	15083.50	SINGLE PUR NAV	1680
7			16648.50	15083.50	1565.00	0.00	15083.50		
8	ROBERT F. HENRY L&D AL	SAM	5350.00	941.00	4409.00	0.00	941.00	MULTI W ALLOC	8590
8	MILLERS FERRY L&D AL	SAM	4175.40	1019.00	3156.40	0.00	1019.00	MULTI W ALLOC	11230
8	ALA-COOSA RIVERS, AL	SAM	4587.10	4160.50	426.60	0.00	4160.50	SINGLE PUR NAV	23240
8			14112.50	6140.50	392.00	0.00	6140.50		

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG No	PROJECT NAME	DIV/ DIST	TOTAL	NAV Alloc Spec	OTHER Alloc Spec	JOINT USE	NAVIGATION AMOUNT	PROJECT TYPE	CIVIS No
									Alloc Spec
9	TENN-TOM WWY AL, MS	SAM	19944.50	15776.10	4168.40	0.00	15776.10	MULTIW ALLOC	18070
9			18544.50	15776.10	4168.40	0.00	15776.10		
10	TENNESSEE RIVER	ORH	14059.64	14059.64	0.00	0.00	14059.64	SINGLE PUR NAV	18080
10			14059.64	14059.64	0.00	0.00	14059.64		
11	GREEN BARREN RVR KY	ORL	1381.13	1381.13	0.00	0.00	1381.13	MULTIW ALLOC	6970
11			1381.13	1381.13	0.00	0.00	1381.13		
12	KENTUCKY RVR KY	ORL	3148.75	3148.75	0.00	0.00	3148.75	SINGLE PUR NAV	8920
12			3148.75	3148.75	0.00	0.00	3148.75		
13	OH RVR LOCKS & DAMS	ORH	16607.70	16420.10	187.60	0.00	16420.10	SINGLE PUR NAV	13140
13	OHIO RV OP CH WORK PA	ORP	148.98	148.98	0.00	0.00	148.98	SINGLE PUR NAV	13160
13	OH RVR OP CH WORK	ORH	1984.80	1984.08	0.00	0.00	1984.80	SINGLE PUR NAV	13170
13	OH RVR LD CONSTR PA	ORP	14047.13	14033.09	14.04	0.00	14033.09	SINGLE PUR NAV	13180
13	OH RVR OP CH WRK IL	ORL	3702.33	3702.33	0.00	0.00	3702.33	SINGLE PUR NAV	13190
13	OH RVR LCK DAMS IL	ORL	22593.64	22593.64	0.00	0.00	22593.64	SINGLE PUR NAV	13200
13			18081.54	18081.54	21.64	0.00	18081.54		
14	KANAWHA RVR LCKS & DAMS WV	ORH	9298.50	9293.10	5.40	0.00	9293.10	SINGLE PUR NAV	8720
14	SUMMERSVILLE LAKE, WV	ORH	1792.80	0.00	728.70	1064.10	1064.41	SINGLE PUR NAV	17740
14			11091.30	9293.10	734.10	1064.10	9393.51		
15	ALLEGHENY RVR PA	ORP	12646.95	12645.91	1.04	0.00	12645.91	SINGLE PUR NAV	230

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	NAVIGATION AMOUNT	TYPE	CWIS NO
15			12646.95	12665.91	1.04	0.00	12655.91		
16	MONONGAHELA RVR PA	ORP	14015.07	14011.02	4.05	0.00	14011.02	MULTI WO ALLOC	11740
16	TYGART LAKE, WV	ORP	1550.23	0.00	96.64	1453.59	1453.59	SINGLE PUR NAV	18730
16			15555.30	14011.02	10.69	1453.59	14116.38		
17	M-K ARK R NAV SYS OK	SWT	4431.08	3916.28	514.80	0.00	3916.28	SINGLE PUR NAV	510
17	M-K ARK R NAV SYS AR	SWL	20351.10	17348.10	2610.20	392.80	17348.10	SINGLE PUR NAV	520
17	DARDENNELLE AR	SWL	5174.20	1906.50	3267.70	0.00	1906.50	MULTI WO ALLOC	4460
17	EUFULA LAKE OK	SWT	4142.50	372.10	3770.40	0.00	372.10	MULTI W ALLOC	5650
17	KEYSTONE LAKE OK	SWT	3566.10	435.70	3130.40	0.00	435.70	SINGLE PUR NAV	8990
17	OOLOGAH LAKE, OK	SWT	1503.50	118.10	1385.40	0.00	118.10	MULTI W ALLOC	13340
17	KERR L D RES OK	SWT	3518.40	1333.00	2185.40	0.00	1333.00	MULTI W ALLOC	15370
17	WEBBERS FLS L&D OK	SWT	2831.80	1237.40	1594.40	0.00	1237.40	SINGLE PUR NAV	19590
17	WHITE RVR AR	LMM	2123.29	2123.29	0.00	0.00	2123.29	SINGLE PUR NAV	19830
17	OZARK L&D AR	SWL	3350.70	519.60	2831.10	0.00	519.60	MULTI W ALLOC	22480
17			61992.67	29310.97	21489.83	392.88	29310.97		
18	PEARL RVR MS-LA	LMK	392.00	377.50	14.50	0.00	377.50	MULTI W ALLOC	13780
18			392.00	377.50	14.50	0.00	377.50		
19	OUACHITA/BLACK R AR LA	LMK	6834.30	6007.30	827.00	0.00	6007.30	MULTI W ALLOC	13460
19	DEGRAY LAKE	LMK	3685.90	15.20	3670.70	0.00	15.20	MULTI W ALLOC	36011
19			36820.20	6022.50	4447.70	6.00	6022.50		
20	RED R WW MISS R TO SHREVE	LMK	7265.50	7066.50	199.00	0.00	7066.50	SINGLE PUR NAV	65

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

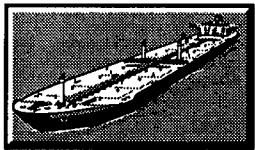
SEG NO	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC SPEC	OTHER ALLOC SPEC	JOINT USE	NAVIGATION AMOUNT	PROJECT TYPE	CWIS NO
21	ILLINOIS WWY, IL	NCR	21065.30	20833.60	231.70	0.00	20833.60	MULTI W ALLOC	8010
21	ILLINOIS WWY, IL	LMS	1101.20	1101.20	0.00	0.00	1101.20	SINGLE PUR NAV	8040
			22166.50	21934.80	221.70	0.00	21934.80		
22	BARKLEY D LAKE BARKLEY, KY	ORN	7657.40	3174.40	4483.00	0.00	3174.40	SINGLE PUR NAV	940
22	CHEATHAM L D	ORN	5977.10	2713.80	3263.30	0.00	2713.80	SINGLE PUR NAV	3040
65	CORDELL HULL D RES	ORN	4094.30	301.40	3792.90	0.00	301.40	SINGLE PUR NAV	3940
22	OLD HICKORY L D	ORN	6094.40	1616.20	4478.20	0.00	1616.20	MULTIW ALLOC	13280
			23821.20	7895.80	16017.40	0.00	7895.80		
23	MO RVR SIOUX CTY TO MTH	MRO	5391.59	2673.59	372.00	2346.00	2908.19	MULTI W ALLOC	621
23	FT PECK DAM MT	MRO	5682.00	1081.40	4600.60	0.00	1081.40	MULTI W ALLOC	6230
23	FT RNDL D LK FFNC CS C SD	MRO	9676.00	1135.50	8540.50	0.00	1135.50	MULTI W ALLOC	6270
23	GARRISON DLK SAKWA ND	MRO	8912.00	1098.70	7813.30	0.00	1098.70	MULTI W ALLOC	6400
23	GAVINS PTD LW CLK LKE SD	MRO	6346.00	762.70	5533.30	0.00	762.70	MULTI WO ALLOC	6440
23	OAHE D LKE SD ND	MRO	9683.00	1084.20	8598.80	0.00	1084.20	MULTI WO ALLOC	12960
23	RATHBURN LKE IOWA	MRK	2127.00	0.00	1104.00	1023.00	102.30	MULTI W ALLOC	14880
23	TUTTLE LKE CK KANSAS	MRK	2516.00	0.00	408.00	2108.00	210.80	MULTI W ALLOC	18660
23	WILSON LKE KANSAS	MRK	1380.00	0.00	752.00	628.00	62.80	MULTI WO ALLOC	20060
			54715.58	78341.19	37772.50	6165.00	8445.59		
29	ATLANTIC IWW VA	NAO	1469.68	1469.68	0.00	0.00	1469.68	MULTI WO ALLOC	720
29	AIWW DISMAL SWAP CANAL	NAO	1642.09	1642.09	0.00	0.00	1642.09	SINGLE PUR NAV	88800
			311177	311177	0.00	0.00	311177		

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION AT 30% SPEC.	OTHER ALLOC SPEC	JOINT USE	NAVIGATION AMOUNT	PROJECT TYPE	CWIS NO
30	AIWW SC	SAC	5319.57	5319.57	0.00	0.00	5319.57	SINGLE PUR NAV	20
30	AIWW-WILM NC	SAW	7034.91	7034.91	0.00	0.00	7034.91	SINGLE PUR NAV	30
30	IWW JAX TO MIAMI FL	SAJ	2697.91	2697.91	0.00	0.00	2697.91	SINGLE PUR NAV	8420
30	AIWW FERND TO ST JOHN RF	SAJ	75.86	75.86	0.00	0.00	75.86	SINGLE PUR NAV	20470
30	AIWW GA	SAS	1569.74	1569.74	0.00	0.00	1569.74	SINGLE PUR NAV	74569
30	CAROLINA BEACH INLET, NC	SAW	586.45	586.45	0.00	0.00	586.45	SINGLE PUR NAV	88801
30	MASONBORO INLET	SAW	3828.79	3828.79	0.00	0.00	3828.79	SINGLE PUR NAV	88802
30	NEW TOPSAIL INLET, NC	SAW	546.75	546.75	0.00	0.00	546.75	SINGLE PUR NAV	88803
30	BOGUE INLET, NC	SAW	617.05	617.05	0.00	0.00	617.05	SINGLE PUR NAV	88804
30	NEW RIVER INLET, NC	SAW	977.07	977.07	0.00	0.00	977.07	SINGLE PUR NAV	88805
			23254.18	23254.18	0.00	0.00	23254.18		
32	ALBENI FALLS D IDAHO	NPS	4330.00	10.90	4319.10	0.00	10.90	SINGLE PUR NAV	200
32	ICE HBR LD WA	NPW	12918.70	5254.60	7664.10	0.00	5254.60	SINGLE PUR NAV	608
32	COUGAR LKE OR	NPP	1134.10	8.00	1126.10	0.00	8.00	SINGLE PUR NAV	4080
32	DALLES LD OR WA	NPP	12243.70	1947.00	10296.70	0.00	1947.00	SINGLE PUR NAV	4400
32	DETROIT B CLIFF OR	NPP	1989.10	5.20	1983.90	0.00	5.20	SINGLE PUR NAV	4690
32	DWORSHAK D RES ID	NPW	9108.40	171.10	8937.30	0.00	171.10	MULTIW ALLOC	5090
32	GREEN PETER FOSTER OR	NPP	2405.60	6.90	2398.70	0.00	6.90	MULTIW ALLOC	6940
32	HILLS CK LKE OR	NPP	676.80	5.30	671.50	0.00	5.30	MULTIW ALLOC	7530
32	JOHN DAY LD OR WA	NPP	12202.90	1411.40	10791.50	0.00	1411.40	MULTIW ALLOC	8480
32	LITTLE GOOSE LD WA	NPW	4534.60	311.30	4223.30	0.00	311.30	MULTIW ALLOC	9880
32	LKOUT PT OR	NPP	5881.30	30.70	5850.60	0.00	30.70	MULTIW ALLOC	10050
32	LWR GRANITE LD WA	NPW	8602.50	227.60	8374.90	0.00	227.60	MULTIW ALLOC	10180
32	LWR MONUMENTAL LD WA	NPW	6547.00	354.00	6193.00	0.00	354.00	MULTIW ALLOC	10210

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**ANALYSIS BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC SPEC	OTHER ALLOC SPEC	JOINT USE	NAVIGATION AMOUNT	PROJECT TYPE	CWIS NO
32	MCNARY LD OR WA	NPW	12398.70	1810.30	10588.40	0.00	1810.30	SINGLE PUR NAV	10920
32	WILMITE FALLS LK OR	NPP	1242.93	1242.93	0.00	0.00	1242.93	MULTIW ALLOC	19960
			36216.33	12797.23	63449.10	0.00	12797.23		
	<b>GRAND TOTAL</b>		<b>954430.61</b>	<b>455116.35</b>	<b>426259.97</b>	<b>73054.29</b>	<b>475959.88</b>		



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX D - Deep Draft Navigation Projects,  
Navigation Cost Recovery Analysis by State,  
O&M Expenditures for FY 1996 (Actual).**

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PWI	STATE NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
<b>4. ASIA/A</b>								
360	AK	ANCHORAGE HBR AK	NPA	1494.19	1494.19	0.00	0.00	SINGLE PUR NAV
16840	AK	CRESCENT BAY HARBOR, AK	NPA	0.00	0.00	0.00	0.00	SINGLE PUR NAV
80508	AK	HOMER HBR AK	NPA	186.66	186.66	0.00	0.00	SINGLE PUR NAV
87071	AK	KETCHIKAN BAR PT HBR, AK	NPA	136.59	136.59	0.00	0.00	SINGLE PUR NAV
10169	AK	ST PAUL HARBOR AK	NPA	-0.50	-0.50	0.00	0.00	SINGLE PUR NAV
631	AK	THOMAS BASIN (KETCHIKAN)	NPA	264.22	264.22	0.00	0.00	SINGLE PUR NAV
65015	AK	WRANGELL NARROWS AK	NPA	-719.19	-719.19	0.00	0.00	SINGLE PUR NAV
		<b>TOTAL</b>		<b>1361.87</b>	<b>1361.87</b>	<b>0.00</b>	<b>0.00</b>	<b>1361.87</b>
<b>ALABAMA</b>								
1120	AL	BAYOU LABATRE AL	SAM	39.72	39.72	0.00	0.00	39.72
11670	AL	MOBILE HBR AL	SAM	20344.11	20344.11	0.00	0.00	20344.11
		<b>Total</b>		<b>20383.83</b>	<b>20383.83</b>	<b>0.00</b>	<b>0.00</b>	<b>20383.83</b>
<b>AMERICA SAMOA</b>								
87038	AS	OFU HBR SAMOA	POD	0.63	0.63	0.00	0.00	0.63
		<b>Total</b>		<b>0.63</b>	<b>0.63</b>	<b>0.00</b>	<b>0.00</b>	<b>0.63</b>
<b>CALIFORNIA</b>								
14360	CA	CHIS HBR CA	SPL	1875.33	1875.33	0.00	0.00	1875.33
4430	CA	DANA POINT HARBOR CA	SPL	0.00	0.00	0.00	0.00	SINGLE PUR NAV
7860	CA	HUMBOLDT HBR BAY CA	SPN	2600.45	2600.45	0.00	0.00	SINGLE PUR NAV
74719	CA	LA AND LONG BEACH HBRS CA	SPL	1001.05	1001.05	0.00	0.00	1001.05

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PMI	STATE NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT
								TYPE
76101	CA LA-BB HARBOR MODEL, CA	SPL	205.60	205.60	0.00	0.00	0.00	205.60 SINGLE PUR NAV
37690	CA MARINA DEL REY CA	SPL	1177.23	1177.23	0.00	0.00	0.00	1177.23 SINGLE PUR NAV
11880	CA MORRO BAY HBR CA	SPL	1672.07	1672.07	0.00	0.00	0.00	1672.07 SINGLE PUR NAV
11880	CA MOSS LANDING HBR CA	SPN	778.98	778.98	0.00	0.00	0.00	778.98 SINGLE PUR NAV
74703	CA NAPA RVR CA	SPN	35.37	35.37	0.00	0.00	0.00	35.37 SINGLE PUR NAV
74720	CA NEWPORT HARBOR CA	SPL	140.68	140.68	0.00	0.00	0.00	140.68 SINGLE PUR NAV
12990	CA OAKLAND HBR CA	SPN	733.08	733.08	0.00	0.00	0.00	733.08 SINGLE PUR NAV
13080	CA OCEANSIDE HBR CA	SPL	317.66	317.66	0.00	0.00	0.00	317.66 SINGLE PUR NAV
13085	CA OCEANSIDE HBR SAND-BY-PASS	SPL	655.22	655.22	0.00	0.00	0.00	655.22 SINGLE PUR NAV
232	CA PORT SAN LUIS CA	SPL	0.80	0.80	0.00	0.00	0.00	0.80 SINGLE PUR NAV
74656	CA PT HUENEME CA	SPL	68.03	68.03	0.00	0.00	0.00	68.03 SINGLE PUR NAV
74722	CA REDONDO BEACH KING HBR CA	SPL	0.00	0.00	0.00	0.00	0.00	0.00 SINGLE PUR NAV
15100	CA REDWOOD CITY HBR CA	SPN	4700.00	4700.00	0.00	0.00	0.00	4700.00 SINGLE PUR NAV
15280	CA RICHMOND HBR CA	SPN	2264.24	2264.24	0.00	0.00	0.00	2264.24 SINGLE PUR NAV
76029	CA S FRANCISCO BAY DLT MDL CA	SPN	2609.75	1599.75	1010.00	0.00	0.00	1599.75 SINGLE PUR NAV
16230	CA S PABLO BAY MRE IS STR CA	SPN	299.91	299.91	0.00	0.00	0.00	299.91 SINGLE PUR NAV
15870	CA SACRAMENTO RVR CA	SPK	1312.12	1312.12	0.00	0.00	0.00	1312.12 SINGLE PUR NAV
16110	CA SAN DIEGO HBR CA	SPL	650.46	650.46	0.00	0.00	0.00	650.46 SINGLE PUR NAV
15750	CA SAN DIEGO-MISSION BAY CA	SPL	0.00	0.00	0.00	0.00	0.00	0.00 SINGLE PUR NAV
16130	CA SAN FRANCISCO HBR CA	SPN	2080.35	2080.35	0.00	0.00	0.00	2080.35 SINGLE PUR NAV
16140	CA SAN FRANCISCO HBR DRFT REM	SPN	2066.07	2066.07	0.00	0.00	0.00	2066.07 SINGLE PUR NAV
16180	CA SAN JOAQUIN RVR CA	SPK	822.85	822.85	0.00	0.00	0.00	822.85 SINGLE PUR NAV
15730	CA SANTA BARBARA HBR CA	SPL	1543.58	1543.58	0.00	0.00	0.00	1543.58 SINGLE PUR NAV
88920	CA SF BAY LONG TERM MGT STRAT	SPN	711.44	711.44	0.00	0.00	0.00	711.44 SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PRJ#	STATE NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROTECTED TYPE
17720	CA SUISUN BAY CHANNEL CA	SPN	960.82	960.82	0.00	0.00	960.82	SINGLE PUR NAV
24190	CA VENTURA HBR CA	SPL	1968.56	1968.56	0.00	0.00	1968.56	SINGLE PUR NAV
	<b>TOTAL</b>		<b>3329.38</b>	<b>3224.17</b>	<b>103.60</b>	<b>0.00</b>	<b>3224.17</b>	
<b>CONNECTICUT</b>								
3760	CT CONN RVR BLW HARTFRD	NED	49.91	49.91	0.00	0.00	49.91	SINGLE PUR NAV
12380	CT NEW HVN HBR CONN	NED	0.22	0.11	0.00	0.00	0.11	SINGLE PUR NAV
	<b>TOTAL</b>		<b>50.13</b>	<b>50.02</b>	<b>0.00</b>	<b>0.00</b>	<b>50.02</b>	
<b>DISTRICT OF COLUMBIA</b>								
19500	DC WASHINGTON HBR DC	NAB	35.05	35.05	0.00	0.00	35.05	SINGLE PUR NAV
	<b>TOTAL</b>		<b>35.05</b>	<b>35.05</b>	<b>0.00</b>	<b>0.00</b>	<b>35.05</b>	
<b>DELAWARE</b>								
73336	DE C&D CAN BRIDGES MAJ REHAB	NAP	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
8215	DE C&D CAN, ST GEORGES BR DE	NAP	14001.34	14001.34	0.00	0.00	14001.34	SINGLE PUR NAV
4570	DE DEL RVR PA NJ PHILA TO S	NAP	20586.48	20586.48	0.00	0.00	20586.48	SINGLE PUR NAV
8160	DE IWW FM DEL R TO CHPKE B D	NAP	17690.73	17690.73	0.00	0.00	17690.73	SINGLE PUR NAV
20040	DE WILMINGTON HBR DEL	NAP	2057.04	2057.04	0.00	0.00	2057.04	SINGLE PUR NAV
	<b>TOTAL</b>		<b>54335.59</b>	<b>54335.59</b>	<b>0.00</b>	<b>0.00</b>	<b>54335.59</b>	
<b>FLORIDA</b>								
2520	FL CANAVERAL HARBOR FL	SAJ	2970.54	2970.54	0.00	0.00	2970.54	SINGLE PUR NAV
76618	FL CARRABELLE HARBOR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PMI STATE/NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
							SINGL PUR NAV
3000 FL CHARLOTTE HARBOR FL	SAJ	94.47	94.47	0.00	0.00	94.47	SINGL PUR NAV
5840 FL FERNANDINA HARBOR FL	SAJ	1403.25	1403.25	0.00	0.00	1403.25	SINGL PUR NAV
6260 FL FORT PIERCE HARBOR FL	SAJ	274.30	274.30	0.00	0.00	274.30	SINGL PUR NAV
8410 FL JACKSONVILLE HARBOR FL	SAJ	7742.50	7742.50	0.00	0.00	7742.50	SINGL PUR NAV
74378 FL MIAMI HBR FL	SAJ	188.11	188.11	0.00	0.00	188.11	SINGL PUR NAV
13590 FL PALM BEACH HBR FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGL PUR NAV
13590 FL PALM BEACH HBR FL	SAJ	1613.62	1613.62	0.00	0.00	1613.62	SINGL PUR NAV
13640 FL PANAMA CITY HBR FL	SAM	706.19	706.19	0.00	0.00	706.19	SINGL PUR NAV
13830 FL PENSACOLA HBR FL	SAM	0.30	0.30	0.00	0.00	0.30	SINGL PUR NAV
76031 FL PORT EVERGLADES HBR FL	SAJ	47.67	47.67	0.00	0.00	47.67	SINGL PUR NAV
14390 FL PT ST. JOE HBR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGL PUR NAV
74390 FL ST. PETERSBURG HBR FL	SAJ	38.87	38.87	0.00	0.00	38.87	SINGL PUR NAV
17960 FL TAMPA HARBOR FL	SAJ	3099.52	3099.52	0.00	0.00	3099.52	SINGL PUR NAV
Total		16,733.34	16,733.34	0.00	0.00	16,733.34	
<b>GEORGIA</b>							
2080 GA BRUNSWICK HBR	SAS	3398.54	3398.54	0.00	0.00	3398.54	SINGL PUR NAV
74576 GA DARIEN HARBOR, GA	SAS	0.99	0.99	0.00	0.00	0.99	SINGL PUR NAV
8232 GA SAVANAH HBR LONG TRM MGT	SAS	9.84	9.84	0.00	0.00	9.84	SINGL PUR NAV
75085 GA SAVANNAH HBR	SAS	14092.57	14092.57	0.00	0.00	14092.57	SINGL PUR NAV
Total		17,501.94	17,501.94	0.00	0.00	17,501.94	
<b>HAWAII</b>							
7660 HI HONOLULU HBR HI	POD	8.74	8.74	0.00	0.00	8.74	SINGL PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

P.M.	STATE NAME:	DIV/ DIST	TOTAL COST	PROJECT TYPE		JOINT USE COST	RECOVERY COST	PROJECT TYPE
				CGST	COST			
<b>ILLINOIS</b>								
2410	IL	CALUMET HBR R IL	NCC	571.70	571.70	0.00	0.00	571.70
45009	IL	CHICAGO HBR IL	NCC	5405.14	5405.14	0.00	0.00	5405.14
3810	IL	CHICAGO RVR IL	NCC	370.09	370.09	0.00	0.00	370.09
19560	IL	WAUKEGAN HBR IL	NCC	644.95	644.95	0.00	0.00	644.95
		<b>TOTAL</b>		<b>6991.88</b>	<b>6991.88</b>	<b>0.00</b>	<b>0.00</b>	<b>6991.88</b>
<b>INDIANA</b>								
2250	IN	BURNS WW HBR IN	NCC	890.81	890.81	0.00	0.00	890.81
18120	IN	INDIANA HBR IN	NCC	486.19	486.19	0.00	0.00	486.19
11060	IN	MICHIGAN CTY HBR IN	NCC	613.88	613.88	0.00	0.00	613.88
		<b>TOTAL</b>		<b>1990.88</b>	<b>1990.88</b>	<b>0.00</b>	<b>0.00</b>	<b>1990.88</b>
<b>LOUISIANA</b>								
8236	LA	7.5 MCY STANDBY TIME	LMN	0.00	0.00	0.00	0.00	0.00
680	LA	ATCH R MORGAN CTY-GULF LA	LMN	8250.25	8250.25	0.00	0.00	8250.25
2440	LA	CALCASIEU R PASS LA	LMN	8707.58	8707.58	0.00	0.00	8707.58
7760	LA	HOUMA NAV CANAL LA	LMN	1643.83	1643.83	0.00	0.00	1643.83
11030	LA	MERMENTAU RIVER LA	LMN	3180.31	3180.31	0.00	0.00	3180.31
68	LA	MISS R-B RGE TO GULF LA	LMN	38460.69	38460.69	0.00	0.00	38460.69
11410	LA	MISS R-GULF OUTLET LA	LMN	17004.48	17004.48	0.00	0.00	17004.48

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

STATE NAME	PROJECT TYPE	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
		TOTAL	7724.14	7720.14	0.00	0.00	7727.14	
<b>MASSACHUSETTS</b>								
1960	MA	BOSTON HBR MA	NED	71.77	71.77	0.00	0.00	71.77
2620	MA	CAPE COD CNL MA	NED	7299.24	6587.90	711.34	0.00	6587.90
14200	MA	PLYMOUTH HBR MA	NED	1.36	1.36	0.00	0.00	1.36
		<b>TOTAL</b>		7371.39	6664.53	711.34	0.00	6664.53
<b>MARYLAND</b>								
870	MD	BALT HBR CHS MD & VA	NAB	2541.26	2541.26	0.00	0.00	2541.26
74955	MD	BALTIMORE HBR & 50FT CHANN	NAB	8776.74	8776.74	0.00	0.00	8776.74
871	MD	BALTIMORE HBR DRIFT REMOVL	NAB	378.11	378.11	0.00	0.00	378.11
872	MD	BALTIMORE HBR PREV OF OBST	NAB	503.24	503.24	0.00	0.00	503.24
294	MD	POTOMAC R BLW WASH DC	NAB	90.82	90.82	0.00	0.00	90.82
		<b>TOTAL</b>		42296.17	42296.17	0.00	0.00	42296.17
<b>MAINE</b>								
8890	ME	KENNEBEC RIVER ME	NED	10.39	10.39	0.00	0.00	10.39
367	ME	PORTLAND HBR ME	NED	145.45	145.45	0.00	0.00	145.45
		<b>TOTAL</b>		155.84	155.84	0.00	0.00	155.84
<b>MICHIGAN</b>								
630	MI	ASHLAND HBR MI	NCE	4.55	4.55	0.00	0.00	4.55
								SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

P.M.	STATE NAME	DM/DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
1110	MI BLACK RIVER-PORT HURON RVR	NCE	3.53	3.53	0.00	0.00	0.00	SINGLE PUR NAV
2990	MI CHARLEVOIX HBR MI	NCE	223.25	223.25	0.00	0.00	0.00	SINGLE PUR NAV
74203	MI CHEYBOYGAN HBR MI	NCE	3.75	3.75	0.00	0.00	0.00	SINGLE PUR NAV
2940	MI CHS-LKE ST CLAIR MI	NCE	127.39	127.39	0.00	0.00	0.00	SINGLE PUR NAV
4710	MI DETROIT RVR MI	NCE	4980.58	4980.58	0.00	0.00	0.00	SINGLE PUR NAV
6130	MI FRANKFORT HBR MI	NCE	3.07	3.07	0.00	0.00	0.00	SINGLE PUR NAV
6670	MI GD HAVEN HBR MI	NCE	1262.81	1262.81	0.00	0.00	0.00	SINGLE PUR NAV
6671	MI GRAND HAVEN HBR MIT SHR DM	NCE	64.20	64.20	0.00	0.00	0.00	SINGLE PUR NAV
46064	MI GRAND MARAIS HBR MI	NCE	8.00	8.00	0.00	0.00	0.00	SINGLE PUR NAV
7300	MI HARBOR BEACH HBR MI	NCE	3.04	3.04	0.00	0.00	0.00	SINGLE PUR NAV
7610	MI HOLLAND HARBOR MI	NCE	530.20	530.20	0.00	0.00	0.00	SINGLE PUR NAV
7611	MI HOLLAND HBR MIT SHR DAM MI	NCE	56.00	56.00	0.00	0.00	0.00	SINGLE PUR NAV
8960	MI KEWEENAW WW MI	NCE	481.96	481.96	0.00	0.00	0.00	SINGLE PUR NAV
10270	MI LUDINGTON HARBOR MI	NCE	349.77	349.77	0.00	0.00	0.00	SINGLE PUR NAV
10480	MI MANISTEE HARBOR MI	NCE	277.03	277.03	0.00	0.00	0.00	SINGLE PUR NAV
48013	MI MARQUETTE HBR MI	NCE	1.95	1.95	0.00	0.00	0.00	SINGLE PUR NAV
45044	MI MENOMINEE HBR MI	NCE	26.41	26.41	0.00	0.00	0.00	SINGLE PUR NAV
11760	MI MONROE HBR MI	NCE	155.35	155.35	0.00	0.00	0.00	SINGLE PUR NAV
12061	MI MUSKEGON HARBOR MITIGATION	NCE	168.78	168.78	0.00	0.00	0.00	SINGLE PUR NAV
12060	MI MUSKEGON HBR MI	NCE	681.62	681.62	0.00	0.00	0.00	SINGLE PUR NAV
13330	MI ONTONAGON HBR MI	NCE	769.35	769.35	0.00	0.00	0.00	SINGLE PUR NAV
13850	MI PENTWATER HBR MI	NCE	421.19	421.19	0.00	0.00	0.00	SINGLE PUR NAV
21530	MI PORTAGE LAKE HBR MI	NCE	130.34	130.34	0.00	0.00	0.00	SINGLE PUR NAV
48012	MI PRESQUE ISLE HBR MI	NCE	0.85	0.85	0.00	0.00	0.00	SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PRW	STATE NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
15590	MI ROUGE RVR MI	NCE	102.57	102.57	0.00	0.00	102.57	SINGLE PUR NAV
44064	MI SAGINAW RIVER DIKE DISPOSAL	NCE	8.72	8.72	0.00	0.00	8.72	SINGLE PUR NAV
57420	MI SAGINAW RVR MI	NCE	1831.01	1831.01	0.00	0.00	1831.01	SINGLE PUR NAV
17300	MI ST CLAIR RVR MI	NCE	812.18	812.18	0.00	0.00	812.18	SINGLE PUR NAV
17350	MI ST JOSEPH HBR MI	NCE	801.97	801.97	0.00	0.00	801.97	SINGLE PUR NAV
17380	MI ST MARYS R MI	NCE	17630.60	11375.00	2477.20	3778.40	11752.84	MULTI TWO ALLOC
17351	MI ST. JOSEPH HBR MIT SHR DAM	NCE	719.03	719.03	0.00	0.00	719.03	SINGLE PUR NAV
19810	MI WHITE LAKE HBR MI	NCE	107.78	107.78	0.00	0.00	107.78	SINGLE PUR NAV
74176	MI WHITE LK HBR MIT SHR DAM	NCE	210.09	210.09	0.00	0.00	210.09	SINGLE PUR NAV
	<b>TOTAL</b>		<b>32398.92</b>	<b>26703.32</b>	<b>2477.26</b>	<b>3778.40</b>	<b>27031.16</b>	
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<b>MINNESOTA</b>								
5050	MN DULUTH-SUPERIOR MN	NCE	3264.30	2750.90	513.40	0.00	2750.90	SINGLE PUR NAV
99871	MN GRAND MARAIS HBR MN	NCE	2.67	2.67	0.00	0.00	2.67	SINGLE PUR NAV
18700	MN TWO HBR'S MN	NCE	3.27	3.27	0.00	0.00	3.27	SINGLE PUR NAV
	<b>TOTAL</b>		<b>3270.24</b>	<b>2756.84</b>	<b>513.40</b>	<b>0.00</b>	<b>2756.84</b>	
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<b>MISSISSIPPI</b>								
7150	MS GULFPORT HARBOR MS	SAM	1643.96	1643.96	0.00	0.00	1643.96	SINGLE PUR NAV
13680	MS PASCAGOULA HBR MS	SAM	1644.91	1644.91	0.00	0.00	1644.91	SINGLE PUR NAV
	<b>TOTAL</b>		<b>3288.87</b>	<b>3288.87</b>	<b>0.00</b>	<b>0.00</b>	<b>3288.87</b>	
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<b>NORTH CAROLINA</b>								

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PRJ#	STATE NAME	DIV DIST	TOTAL COST	NAVIGATION COST		OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
				SAW	SAW				
1210	NC BEAUFORT HBR NC	SAW	0.00	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
2640	NC CAPE FEAR R ABOVE WILM NC	SAW	415.10	273.60	141.50	0.00	0.00	273.60	SINGLE PUR NAV
11810	NC MOREHD CTY HBR NC	SAW	2313.10	2313.10	0.00	0.00	0.00	2313.10	SINGLE PUR NAV
20030	NC WILMINGTTON BW NC	SAW	7545.03	7545.03	0.00	0.00	0.00	7545.03	SINGLE PUR NAV
	TOTAL		10227.23	10227.23	44.30	0.00	0.00	10227.23	
<b>NEW HAMPSHIRE</b>									
512	NH PISGMTH HBR PISTAQUA RIVER	NED	5.42	2.71	0.00	0.00	0.00	2.71	SINGLE PUR NAV
	TOTAL		5.42	2.71	0.00	0.00	0.00	2.71	
<b>NEW JERSEY</b>									
80	NJ ABSECON INLET NJ	NAP	0.00	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
22140	NJ COLD SPRNG INLET	NAP	520.16	520.16	0.00	0.00	0.00	520.16	SINGLE PUR NAV
43005	NJ DEL RIV/PHL TO CAMDEN NJ	NAP	24.30	24.30	0.00	0.00	0.00	24.30	SINGLE PUR NAV
12550	NJ NWRKB HKCSAK PASS R NJ	NAN	365.26	365.26	0.00	0.00	0.00	365.26	SINGLE PUR NAV
12520	NJ NY NJ CHS NY NJ	NAN	77.24	77.24	0.00	0.00	0.00	77.24	SINGLE PUR NAV
14860	NJ RARITAN RIVER NJ	NAN	-126.39	-126.39	0.00	0.00	0.00	-126.39	SINGLE PUR NAV
21870	NJ RTN R ARTHR KILL CUT C NJ	NAN	0.00	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
24950	NJ SALEM RIVER NJ	NAP	2.41	2.41	0.00	0.00	0.00	2.41	SINGLE PUR NAV
	TOTAL		862.98	862.98	0.00	0.00	0.00	862.98	
<b>NEW YORK</b>									
1040	NY BAY RDGE RED HOOK CH NY	NAN	39.50	39.50	0.00	0.00	0.00	39.50	SINGLE PUR NAV
1660	NY BL ROCK CH TONAWANDA HBR	NCB	3546.51	3546.51	0.00	0.00	0.00	3546.51	SINGLE PUR NAV

**TABLE 1D**  
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**FY 1996 (ACTUAL)**

PRJ#	STATE NAME	DIW DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT
								TYPE
2140	NY BUFFALO HBR NY	NCB	613.47	613.47	0.00	0.00	0.00	SINGLE PUR NAV
41015	NY BUTTERMILK CH NY	NAN	819.85	819.85	0.00	0.00	0.00	SINGLE PUR NAV
50600	NY DUNKIRK HBR NY	NCB	262.10	262.10	0.00	0.00	0.00	SINGLE PUR NAV
41062	NY EAST RIVER NY	NAN	84.38	84.38	0.00	0.00	0.00	SINGLE PUR NAV
6860	NY GT SODUS BAY HBR NY	NCB	293.84	293.84	0.00	0.00	0.00	SINGLE PUR NAV
7810	NY HUDSON R NY TO ALB(MNT)	NAN	2391.90	2391.90	0.00	0.00	0.00	SINGLE PUR NAV
7820	NY HUDSON R NY TO ALB(O&C)	NAN	1109.33	1109.33	0.00	0.00	0.00	SINGLE PUR NAV
7800	NY HUDSON R. CHANNEL, NY	NAN	-50.43	-50.43	0.00	0.00	0.00	SINGLE PUR NAV
54000	NY JAMAICA BAY NY	NAN	637.47	637.47	0.00	0.00	0.00	SINGLE PUR NAV
9970	NY LITTLE SODUS BAY HBR NY	NCB	219.49	219.49	0.00	0.00	0.00	SINGLE PUR NAV
12490	NY NEW YORK HARBOR NY	NAN	6471.46	6471.46	0.00	0.00	0.00	SINGLE PUR NAV
12500	NY NEW YORK HBR DRIFT, NY	NAN	4986.70	4986.70	0.00	0.00	0.00	SINGLE PUR NAV
17760	NY NY HABOR PREV OF OBSTRUCTN	NAN	709.43	709.43	0.00	0.00	0.00	SINGLE PUR NAV
13440	NY OSWEGO HBR NY	NCB	393.56	393.56	0.00	0.00	0.00	SINGLE PUR NAV
15390	NY ROCHESTER HBR NY	NCB	37.43	37.43	0.00	0.00	0.00	SINGLE PUR NAV
<b>TOTAL</b>			<b>22566.99</b>	<b>22565.98</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>22565.99</b>
<b>OHIO</b>								
650	OH ASHTABULA HBR OH	NCB	428.46	428.46	0.00	0.00	0.00	428.46
3430	OH CLEVELAND HBR OH	NCB	5440.47	5440.47	0.00	0.00	0.00	5440.47
3770	OH CONNEAUT HBR OH	NCB	649.44	649.44	0.00	0.00	0.00	649.44
5760	OH FAIRPORT HBR OH	NCB	329.96	329.96	0.00	0.00	0.00	329.96
7920	OH HURON HBR OH	NCB	1229.99	1229.99	0.00	0.00	0.00	1229.99
10060	OH LORAIN HBR OH	NCB	2089.37	2089.37	0.00	0.00	0.00	2089.37

**TABLE 1D**  
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**FY 1996 (ACTUAL)**

PROJ ID	STATE NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
								SINGLE PUR NAV MULTI W ALLOC SINGLE PUR NAV SINGLE PUR NAV
16260	OH	SANDUSKY HBR OH	NCB	109.76	109.76	0.00	0.00	109.76
18280	OH	TOLEDO HBR OH	NCB	2973.53	2973.53	0.00	0.00	2973.53
		TOTAL:		3283.59	3283.59	0.00	0.00	3283.59
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8238	OR	7.5 MCY STANDBY TIME	NPP	0.26	0.26	0.00	0.00	0.26
80546	OR	BONNEVILLE LOCK DAM OR WA	NPP	19131.90	6761.80	12370.10	0.00	6761.80
3620	OR	COL R BTN VNCR DALLES OR	NPP	249.83	249.83	0.00	0.00	249.83
3630	OR	COLMBA LWR WLMTE RVR OR	NPP	17041.83	17041.83	0.00	0.00	17041.83
3660	OR	COLUMBIAT MOTH OR WA	NPP	6661.66	6661.66	0.00	0.00	6661.66
3840	OR	COOS BAY OR	NPP	2635.31	2635.31	0.00	0.00	2635.31
14370	OR	PORT ORFORD OR	NPP	465.94	465.94	0.00	0.00	465.94
72765	OR	SEWARD HARBOR, OR	NPA	209.01	209.01	0.00	0.00	209.01
16860	OR	SUSSLAW RIVER OR	NPP	394.96	394.96	0.00	0.00	394.96
16930	OR	SKIPANON CHANNEL OR	NPP	15.89	15.89	0.00	0.00	15.89
18230	OR	TILLAMOOK BAY BAR OR	NPP	7.21	7.21	0.00	0.00	7.21
18750	OR	UMPQUA RIVER OR	NPP	707.81	707.81	0.00	0.00	707.81
20290	OR	YAQUINA BAY HBR OR	NPP	1725.48	1725.48	0.00	0.00	1725.48
		TOTAL:		19247.59	19247.59	12370.10	0.00	19247.59
<hr/>								
<b>PENNSYLVANIA</b>								
8237	PA	7.5 MCY STANDBY TIME	NAP	0.00	0.00	0.00	0.00	0.00
4550	PA	DEL RVR BETWN PHILA TREN	NAP	3363.17	3363.17	0.00	0.00	3363.17
5600	PA	ERIE HBR PA	NCB	895.61	895.61	0.00	0.00	895.61

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

P.W.I.	STATE NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
73836	PA MAJOR REHAB-C&D BRIDGES,PA	NAP	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
16550	PA SCHUYLKILL R PA	NAP	1916.71	1916.71	0.00	0.00	1916.71	SINGLE PUR NAV
	<b>TOTAL</b>		<b>6175.49</b>	<b>6175.49</b>			<b>6175.49</b>	
<b>Puerto Rico</b>								
20500	PR ARECIBO HBR PR	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
22280	PR MAYAGUEZ HBR PR	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
75007	PR PONCE HBR PR	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
16190	PR SAN JUAN HBR PR	SAJ	44.28	44.28	0.00	0.00	44.28	SINGLE PUR NAV
	<b>TOTAL</b>		<b>44.28</b>	<b>44.28</b>			<b>44.28</b>	
<b>Rhode Island</b>								
73445	RI BLOCK ISLAND HBR OF REF RI	NED	75.78	75.78	0.00	0.00	75.78	SINGLE PUR NAV
566	RI PROVIDENCE R & HBR RI	NED	124.59	124.59	0.00	0.00	124.59	SINGLE PUR NAV
72611	RI PT JUDTH PND&HBR OF REF RI	NED	124.50	124.50	0.00	0.00	124.50	SINGLE PUR NAV
568	RI SAKONNET HBR RI	NED	0.16	0.16	0.00	0.00	0.16	SINGLE PUR NAV
	<b>TOTAL</b>		<b>325.03</b>	<b>325.03</b>			<b>325.03</b>	
<b>South Carolina</b>								
2980	SC CHARLESTON HARBOR SC	SAC	3533.45	3533.45	0.00	0.00	3533.45	SINGLE PUR NAV
8221	SC CHAS HBR REDIVERSN FISH LF	SAC	331.60	331.60	0.00	0.00	331.60	SINGLE PUR NAV
74354	SC COOPER R SC	SAC	2824.98	2808.98	16.00	0.00	2808.98	SINGLE PUR NAV
6480	SC GEORGETOWN HARBOR SC	SAC	2423.17	2423.17	0.00	0.00	2423.17	SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

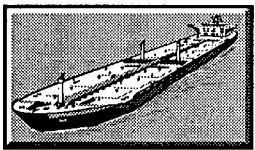
PW#	STATE NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
14380	SC PORT ROYAL HARBOR SC	SAC	932.98	932.98	0.00	0.00	932.98	SINGLE PUR NAV
16730	SC SHIPYARD RVR SC	SAC	726.82	726.82	0.00	0.00	726.82	SINGLE PUR NAV
1	SC TOWN CK SC	SAC	393.92	393.92	0.00	0.00	393.92	SINGLE PUR NAV
	<b>TOTAL</b>		<b>11166.92</b>	<b>11166.92</b>	<b>0.00</b>	<b>0.00</b>	<b>11166.92</b>	
<b>TEXAS</b>								
88912	TX BARBOUR TERMINAL SHIP CNL	SWG	-75.33	-75.33	0.00	0.00	-75.33	SINGLE PUR NAV
88910	TX BAYPORT SHIP CHANNEL	SWG	2438.66	2438.66	0.00	0.00	2438.66	SINGLE PUR NAV
1990	TX BRAZOS IS TX	SWG	673.91	673.91	0.00	0.00	673.91	SINGLE PUR NAV
2930	TX CH TO FT BOLIVAR TX	SWG	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
8213	TX CHANNEL TO RED BLUFF, TX	SWG	151.61	151.61	0.00	0.00	151.61	SINGLE PUR NAV
14340	TX CORPUS CHRISTI CH TX	SWG	2876.19	2876.19	0.00	0.00	2876.19	SINGLE PUR NAV
6170	TX FREEPORT HBR TX	SWG	5947.44	5947.44	0.00	0.00	5947.44	SINGLE PUR NAV
6340	TX GALVESTON HBR CH TX	SWG	321.20	321.20	0.00	0.00	321.20	SINGLE PUR NAV
88911	TX GREENS BAYOU CHANNEL, TX	SWG	0.23	0.23	0.00	0.00	0.23	SINGLE PUR NAV
7780	TX HOUSTON SHIP CHNL	SWG	4305.67	4305.67	0.00	0.00	4305.67	SINGLE PUR NAV
10810	TX MATAGORDA SHIP CHNL TX	SWG	3844.89	3844.89	0.00	0.00	3844.89	SINGLE PUR NAV
15780	TX SABINE-NECHES W/W TX	SWG	17118.47	17118.47	0.00	0.00	17118.47	SINGLE PUR NAV
18130	TX TEXAS CITY TX	SWG	1640.88	1640.88	0.00	0.00	1640.88	SINGLE PUR NAV
	<b>TOTAL</b>		<b>39243.62</b>	<b>39243.62</b>	<b>0.00</b>	<b>0.00</b>	<b>39243.62</b>	
<b>VIRGINIA</b>								
73772	VA CAPE CHARLES CITY HBR VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73783	VA CH TO NEWPORT NEWS VA	NAO	947.23	947.23	0.00	0.00	947.23	SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PW#	STATE NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
1002	VA HAMPTON ROADS DRIFT REMOVL	NAO	676.15	676.15	0.00	0.00	676.15	SINGLE PUR NAV
15170	VA HAMPTON ROADS PRE OF OBST	NAO	310.50	310.50	0.00	0.00	310.50	SINGLE PUR NAV
8430	VA JAMES RVR VA	NAO	3945.26	3945.26	0.00	0.00	3945.26	SINGLE PUR NAV
12801	VA NORFOLK HBR CHS VA	NAO	6191.46	6191.46	0.00	0.00	6191.46	SINGLE PUR NAV
597	VA POTOMAC R AT ALEX VA	NAB	36.59	36.59	0.00	0.00	36.59	SINGLE PUR NAV
14520	VA POTOMAC R. DRIFT REMOVL VA	NAB	858.59	858.59	0.00	0.00	858.59	SINGLE PUR NAV
73800	VA THIMBLE SHOAL CH VA	NAO	1205.10	1205.10	0.00	0.00	1205.10	SINGLE PUR NAV
73803	VA YORK RIVER VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
	<b>TOTAL</b>		<b>\$41,703.88</b>	<b>\$41,703.88</b>	<b>0.00</b>	<b>0.00</b>	<b>\$14,170.38</b>	
<b>WASHINGTON</b>								
1310	WA BELLINGHAM HBR WA	NPS	328.31	328.31	0.00	0.00	328.31	SINGLE PUR NAV
79205	WA EDIZ HOOK WA	NPS	5.32	5.32	0.00	0.00	5.32	SINGLE PUR NAV
5700	WA EVERETT HBR SNOHOMISH RV	NPS	912.49	912.49	0.00	0.00	912.49	SINGLE PUR NAV
24370	WA FRIDAY HARBOR	NPS	70.82	70.82	0.00	0.00	70.82	SINGLE PUR NAV
6770	WA GRAYS HBR WA	NPS	7560.15	7560.15	0.00	0.00	7560.15	SINGLE PUR NAV
87153	WA KENMORE NAVIGATION CH	NPS	95.53	95.53	0.00	0.00	95.53	SINGLE PUR NAV
72920	WA LAKE CROCKETT WA	NPS	2.06	2.06	0.00	0.00	2.06	SINGLE PUR NAV
9400	WA LK WASHINGTON SHP CNL WA	NPS	6419.80	5904.50	515.30	0.00	5904.50	SINGLE PUR NAV
13320	WA OLYMPIA HBR WA	NPS	16.22	16.22	0.00	0.00	16.22	SINGLE PUR NAV
13970	WA PUGET SOUND ITS TRIB WW	NPS	756.49	756.49	0.00	0.00	756.49	SINGLE PUR NAV
67318	WA SEATTLE HBR WA	NPS	622.60	622.60	0.00	0.00	622.60	SINGLE PUR NAV
72902	WA TACOMA HBR WA	NPS	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
19990	WA WILLAPA HBR	NPS	137.33	137.33	0.00	0.00	137.33	SINGLE PUR NAV

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PRJ#	STATE NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
								1641.82
<b>WISCONSIN</b>								
74180	WI	GREEN BAY HBR DIKE DISP WI	NCE	144.28	0.00	0.00	144.28	SINGLE PUR NAV
6910	WI	GREEN BAY HBR WI	NCE	1515.67	0.00	0.00	1515.67	SINGLE PUR NAV
8910	WI	KENOSHA HARBOR WI	NCE	47.90	47.90	0.00	47.90	SINGLE PUR NAV
76050	WI	KEWAUNEE HARBOR WI	NCE	240.32	240.32	0.00	240.32	SINGLE PUR NAV
10510	WI	MANITOWOC HBR WI	NCE	120.78	120.78	0.00	120.78	SINGLE PUR NAV
11270	WI	MILWAUKEE HBR WI	NCE	4247.21	4247.21	0.00	4247.21	SINGLE PUR NAV
23370	WI	OCONTO HBR WI	NCE	0.74	0.74	0.00	0.74	SINGLE PUR NAV
74190	WI	PORT WING HBR WI	NCE	1.03	1.03	0.00	0.00	SINGLE PUR NAV
14420	WI	PT WASHINGTON HBR WI	NCE	1.35	1.35	0.00	0.00	SINGLE PUR NAV
66700	WI	SHEBOYGAN HBR WI	NCE	87.17	87.17	0.00	87.17	SINGLE PUR NAV
17660	WI	STURGEON B & L MICH CAN, WI	NCE	117.97	117.97	0.00	117.97	SINGLE PUR NAV
18710	WI	TWO RVR'S HBR WI	NCE	1103.45	1103.45	0.00	1103.45	SINGLE PUR NAV
<b>TOTAL</b>			<b>1627.87</b>	<b>1627.87</b>	<b>0.00</b>	<b>0.00</b>	<b>1627.87</b>	
<b>TOTAL ALL STATES</b>								
			<b>402477.73</b>	<b>46344.49</b>	<b>17751.04</b>	<b>1778.40</b>	<b>461722.81</b>	



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX E - Shallow Draft Navigation Projects Not  
Subject to the Inland Waterway Fuel Tax,  
Navigation Cost Recovery Analysis by State, O&M  
Expenditures for FY 1996 (Actual).**

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PHI	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROTECT TYPE
	AK	NINILCHIK HARBOR	NPA	171.62	171.62	0.00	0.00	171.62	SINGLE PUR NAV
	AK	DILLINGHAM HBR AK	NPA	362.07	362.07	0.00	0.00	362.07	SINGLE PUR NAV
	AK	DOUGLAS HBR AK	NPA	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
	AK	DRY PASS AK	NPA	42.23	42.23	0.00	0.00	42.23	SINGLE PUR NAV
	AK	NOME HBR AK	NPA	523.40	523.40	0.00	0.00	523.40	SINGLE PUR NAV
	AK	VALDEZ HBR AK	NPA	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
		<b>TOTAL</b>		<b>1069.32</b>	<b>1069.32</b>	<b>0.00</b>	<b>0.00</b>	<b>1069.32</b>	
	AL	BAYOU CODEN AL	SAM	12.31	12.31	0.00	0.00	12.31	SINGLE PUR NAV
	AL	BON SECOUR RVR AL	SAM	35.48	35.48	0.00	0.00	35.48	SINGLE PUR NAV
	AL	DAUPHIN ISLE BAY AL	SAM	250.15	250.15	0.00	0.00	250.15	SINGLE PUR NAV
	AL	DOG AND FOWL RIVERS, AL	SAM	676.10	676.10	0.00	0.00	676.10	SINGLE PUR NAV
	AL	FLY GREEK AL	SAM	102.11	102.11	0.00	0.00	102.11	SINGLE PUR NAV
	AL	PERDIDO PASS CH AL	SAM	30.41	30.41	0.00	0.00	30.41	SINGLE PUR NAV
		<b>TOTAL</b>		<b>1166.36</b>	<b>1166.36</b>	<b>0.00</b>	<b>0.00</b>	<b>1166.36</b>	
	AR	HELENA HBR AR	LMM	217.92	217.92	0.00	0.00	217.92	SINGLE PUR NAV
	AR	OSCEOLA HBR AR	LMM	408.32	408.32	0.00	0.00	408.32	SINGLE PUR NAV
	AR	YELLOW BEND PORT, AR	LMK	31.63	31.63	0.00	0.00	31.63	SINGLE PUR NAV
		<b>TOTAL</b>		<b>657.87</b>	<b>657.87</b>	<b>0.00</b>	<b>0.00</b>	<b>657.87</b>	
	AS	AUASI SBH, AM SAMOA	POD	5.92	5.92	0.00	0.00	5.92	SINGLE PUR NAV

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PRJ#	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	CARRIER COST	JOINT USE COST	RECOVERY COST	PROJECT
									TYPE
87036	AS	AUNUU HBR AS	POD	65.43	65.43	0.00	0.00	65.43	SINGLE PUR NAV
		TOTAL		71.35	71.35	0.00	0.00	71.35	
<b>CALIFORNIA</b>									
74701	CA	HALF MOON BAY/PILAR PT HBR	SPN	87.00	87.00	0.00	0.00	87.00	SINGLE PUR NAV
12940	CA	NOYO RVR HBR CA	SPN	7.08	7.08	0.00	0.00	7.08	SINGLE PUR NAV
13940	CA	PETALUMA RVR CA	SPN	345.60	345.60	0.00	0.00	345.60	SINGLE PUR NAV
74709	CA	S RAFAEL CK CA	SPN	0.66	0.66	0.00	0.00	0.66	SINGLE PUR NAV
8187	CA	SACRAMENTO RVR CA	SPK	223.56	223.56	0.00	0.00	223.56	SINGLE PUR NAV
15810	CA	SACRAMENTO RVR DEBRIS CTRL	SPK	754.45	309.45	445.00	0.00	309.45	SINGLE PUR NAV
20410	CA	YUBA RIVER DEBRIS TREAT CA	SPK	14.29	14.29	0.00	0.00	14.29	SINGLE PUR NAV
		TOTAL		1432.64	987.64	445.00	0.00	987.64	
<b>CONNECTICUT</b>									
5910	CT	FIVE MILE RIVER, CT	NED	117.90	117.90	0.00	0.00	117.90	SINGLE PUR NAV
231	CT	GUILFORD HBR CT	NED	0.19	0.19	0.00	0.00	0.19	SINGLE PUR NAV
76064	CT	STONY CK BRANFORD CONN	NED	0.18	0.18	0.00	0.00	0.18	SINGLE PUR NAV
		TOTAL		118.27	118.27	0.00	0.00	118.27	
<b>DISTRICT OF COLUMBIA</b>									
73608	DC	ANACOSTIA RVR BASIN DC M	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
		TOTAL		0.00	0.00	0.00	0.00	0.00	
<b>DELAWARE</b>									
8110	DE	INDIAN RVR INLET BAY DEL	NAP	477.72	477.72	0.00	0.00	477.72	SINGLE PUR NAV
8170	DE	IWW REHOBOT BAY TO DELA	NAP	154.23	154.23	0.00	0.00	154.23	SINGLE PUR NAV

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

FWI	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
			NAP	-2.17	0.00	0.00	-2.17	SINGLE PUR NAV	
73857	DE	MISPLILL RVR DEL	NAP	39.19	39.19	0.00	0.00	39.19	SINGLE PUR NAV
12020	DE	MURDERKILL RVR	NAP	668.97	668.97	0.00	0.00	668.97	SINGLE PUR NAV
		<b>TOTAL</b>							
<hr/>									
<b>FLORIDA</b>									
74478	FL	ANCLOTE RIVER, FL	SAJ	4.02	4.02	0.00	0.00	4.02	SINGLE PUR NAV
430	FL	APALACHICOLA BAY FL	SAM	93.33	93.33	0.00	0.00	93.33	SINGLE PUR NAV
74482	FL	BAKERS HAULOVR INLT FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
23230	FL	BLACKWATER RVR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
87215	FL	CEDAR ISLAND KEATON BCH FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
12150	FL	CH, NAPLES-BIG MARCO FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
3400	FL	CLEARWATER PASS FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
4300	FL	CROSS FLA BARGE CANAL FL	SAJ	22.71	22.71	0.00	0.00	22.71	SINGLE PUR NAV
74488	FL	CRYSTAL RIVER, FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
4980	FL	EAST PASS CHANNEL FL	SAM	1038.91	1038.91	0.00	0.00	1038.91	SINGLE PUR NAV
74489	FL	EAU GALLIE HBR FL	SAJ	2.33	2.33	0.00	0.00	2.33	SINGLE PUR NAV
5620	FL	ESCAMBIA-CONECUH RV FL AL	SAM	0.20	0.20	0.00	0.00	0.20	SINGLE PUR NAV
6220	FL	FORT MYERS BEACH FL	SAJ	0.50	0.50	0.00	0.00	0.50	SINGLE PUR NAV
74495	FL	HORSESHOE COVE, FL	SAJ	99.04	99.04	0.00	0.00	99.04	SINGLE PUR NAV
2480	FL	IWW CLCHEE R TO ANLTE R F	SAJ	60.68	60.68	0.00	0.00	60.68	SINGLE PUR NAV
1001	FL	JOHNS PASS, PINELLAS, FL	SAJ	56.15	56.15	0.00	0.00	56.15	SINGLE PUR NAV
9280	FL	LA GRANGE BAYOU FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
23100	FL	LONGBOAT PASS FL	SAJ	10.94	10.94	0.00	0.00	10.94	SINGLE PUR NAV
22250	FL	MELBOURNE HBR FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
74483	FL	NEW PASS SARASOTA FL	SAJ	95.27	95.27	0.00	0.00	95.27	SINGLE PUR NAV
13240	FL	OKEECHOBEE WWY, FL	SAJ	4649.20	3765.20	884.00	0.00	3765.20	SINGLE PUR NAV

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PWM	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROTECT TYPE
13250	FL	OKLAWAHA RIVER FL	SAJ	125.48	125.48	0.00	0.00	125.48	SINGLE PUR NAV
7510	FL	PANACEA HBR FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
14310	FL	PONCE DE LEON INLET FL	SAJ	245.93	245.93	0.00	0.00	245.93	SINGLE PUR NAV
75027	FL	ST AUGUSTINE HBR FL	SAJ	3192.12	3192.12	0.00	0.00	3192.12	SINGLE PUR NAV
74542	FL	ST MARKS R FL	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
74387	FL	ST. JOHNS R TO LK HRVY FL	SAJ	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
17370	FL	ST. LUCIE INLET FL	SAJ	510.53	510.53	0.00	0.00	510.53	SINGLE PUR NAV
74508	FL	STEINATCHEE RIVER, FL	SAJ	-0.70	-0.70	0.00	0.00	-0.70	SINGLE PUR NAV
74391	FL	SUWANEE RIVER, FL	SAJ	0.13	0.13	0.00	0.00	0.13	SINGLE PUR NAV
74393	FL	WITHLAOCOOCHEE RIVER	SAJ	38.46	38.46	0.00	0.00	38.46	SINGLE PUR NAV
		<b>TOTAL</b>		<b>10245.23</b>	<b>935.23</b>	<b>884.00</b>	<b>0.00</b>	<b>\$36,423</b>	
<b>GEORGIA</b>									
7380	GA	HARTWELL GA,SC	SAS	8580.20	117.30	8462.90	0.00	117.30	MULTI W ALLOC
16450	GA	SAV R BELOW AUGUSTA GA SC	SAS	1677.66	1677.66	0.00	0.00	1677.66	SINGLE PUR NAV
3350	GA	THURMOND DAM & RES	SAS	8571.10	193.90	8377.20	0.00	193.90	MULTI W ALLOC
		<b>TOTAL</b>		<b>\$826.93</b>	<b>193.90</b>	<b>18840.10</b>	<b>0.00</b>	<b>\$38,386</b>	
<b>IAWA</b>									
74041	IA	DAVENPORT SMALL BOAT HBR	NCR	4.94	4.94	0.00	0.00	4.94	SINGLE PUR NAV
88828	IA	FORT MADISON HARBOR, IA	NCR	72.21	72.21	0.00	0.00	72.21	SINGLE PUR NAV
74251	IA	MUSCATINE HBR	NCS	16.00	16.00	0.00	0.00	16.00	SINGLE PUR NAV
		<b>TOTAL</b>		<b>\$3.15</b>	<b>93.15</b>	<b>0.00</b>	<b>0.00</b>	<b>\$3.15</b>	
<b>ILLINOIS</b>									
74228	IL	ANDALUSIA HBR, IL	NCR	42.07	42.07	0.00	0.00	42.07	SINGLE PUR NAV

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

P/WI	STATE	NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
8218	IL	LAKE MICHIGAN DIVERSION, IL	NCC	406.31	406.31	0.00	0.00	406.31	SINGLE PUR NAV
88825	IL	ROCK ISLAND SM BOAT HARBOR	NCR	65.97	65.97	0.00	0.00	65.97	SINGLE PUR NAV
		TOTAL		514.35	514.35	0.00	0.00	514.35	
INDIANA									
87387	IN	BURNS WATER WAY SBH	NCC	137.50	137.50	0.00	0.00	137.50	SINGLE PUR NAV
		TOTAL		137.50	137.50	0.00	0.00	137.50	
KENTUCKY									
10220	KY	LICKING RIVER OPEN CHANNEL	ORL	10.66	10.66	0.00	0.00	10.66	SINGLE PUR NAV
22020	KY	STAHR HBR, HICKMAN PORT	LMM	302.37	302.37	0.00	0.00	302.37	SINGLE PUR NAV
		TOTAL		313.03	313.03	0.00	0.00	313.03	
LOUISIANA									
900	LA	BARATARIA BAY WW LA	LMN	2141.88	2141.88	0.00	0.00	2141.88	SINGLE PUR NAV
158	LA	BAYOU LACOMBE	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
24	LA	BAYOU SEGNETTE WWY, LA	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
1150	LA	BAYOU TECH LA	LMN	173.77	173.77	0.00	0.00	173.77	SINGLE PUR NAV
1160	LA	BAYOU TECH VERMILLION R LA	LMN	58.58	58.58	0.00	0.00	58.58	SINGLE PUR NAV
2310	LA	BYU LAFOURCHE & JUMP WW, LA	LMN	8.66	8.66	0.00	0.00	8.66	SINGLE PUR NAV
2330	LA	CADDY LAKE LA TX	LMK	127.50	0.00	62.90	64.60	64.60	MULTI TWO ALLOC
6200	LA	FRESHWATER BAYOU LA	LMN	1664.40	1664.40	0.00	0.00	1664.40	SINGLE PUR NAV
9360	LA	LAKE PROVIDENCE HBR LA	LMK	203.92	203.92	0.00	0.00	203.92	SINGLE PUR NAV
87168	LA	MADISON PARISH PORT	LMK	40.00	40.00	0.00	0.00	40.00	SINGLE PUR NAV
63	LA	MISS R OUTLTS VENICE LA	LMN	1870.38	1870.38	0.00	0.00	1870.38	SINGLE PUR NAV
99984	LA	MR&T-BATON ROUGE HBR	LMV	405.00	405.00	0.00	0.00	405.00	SINGLE PUR NAV

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

FWI	STATE	NAME	DIV DIST	TOTAL DIST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
22390	LA	PETIT ANSE,TIGRE,CARLIN BY	LMN	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
17970	LA	TANGIPOHOA RV LA	LMN	57.32	57.32	0.00	0.00	57.32	SINGLE PUR NAV
201	LA	TICKFAW & NATALBANY	LMN	1.40	1.40	0.00	0.00	1.40	SINGLE PUR NAV
202	LA	WW FM EMPIRE TO GULF LA	LMN	63.23	63.23	0.00	0.00	63.23	SINGLE PUR NAV
188	LA	WW IWW TO BAYOU DULAC LA	LMN	18.52	18.52	0.00	0.00	18.52	SINGLE PUR NAV
		<b>TOTAL</b>		<b>6634.56</b>	<b>6634.56</b>	<b>\$2.98</b>	<b>\$4.80</b>	<b>\$713.52</b>	
<b>MASSACHUSETTS</b>									
87009	MA	ANDREWS RVR MA	NED	-0.62	-0.62	0.00	0.00	-0.62	SINGLE PUR NAV
39001	MA	CHATHAM HBR MA	NED	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
3560	MA	COHASSET HBR MA	NED	16.89	16.89	0.00	0.00	16.89	SINGLE PUR NAV
409	MA	CUTTYHUNK HBR MA	NED	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
5080	MA	DUXBURY HBR MA	NED	763.90	763.90	0.00	0.00	763.90	SINGLE PUR NAV
6920	MA	GREEN HBR MA	NED	229.08	229.08	0.00	0.00	229.08	SINGLE PUR NAV
421	MA	HYANNIS HBR MA	NED	53.00	53.00	0.00	0.00	53.00	SINGLE PUR NAV
39018	MA	NEWBURYPORT HBR MA	NED	338.83	338.83	0.00	0.00	338.83	SINGLE PUR NAV
438	MA	ROCKPORT HBR MA	NED	6.15	6.15	0.00	0.00	6.15	SINGLE PUR NAV
39065	MA	SCITUATE HARBOR, MA	NED	438.69	438.69	0.00	0.00	438.69	SINGLE PUR NAV
452	MA	WELLFLEET HBR MA	NED	-0.08	-0.08	0.00	0.00	-0.08	SINGLE PUR NAV
		<b>TOTAL</b>		<b>1445.94</b>	<b>1445.94</b>	<b>0.00</b>	<b>0.00</b>	<b>1445.94</b>	
<b>MARYLAND</b>									
73554	MD	BROAD Ck MD	NAB	139.83	139.83	0.00	0.00	139.83	SINGLE PUR NAV
73557	MD	CHESTER RVR MD	NAB	63.45	63.45	0.00	0.00	63.45	SINGLE PUR NAV
51950	MD	CRISFIELD HBR MD	NAB	35.54	35.54	0.00	0.00	35.54	SINGLE PUR NAV
73583	MD	FISHING BAY MD	NAB	67.34	67.34	0.00	0.00	67.34	SINGLE PUR NAV

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

FWM	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
									20.21
73384	MD	FISHING C K MD	NAB	20.21	20.21	0.00	0.00	0.00	SINGLE PUR NAV
73385	MD	HERRING B ROCKHD C K MD	NAB	0.10	0.10	0.00	0.00	0.10	SINGLE PUR NAV
62011	MD	HERRING C K TALL TIMBERS MD	NAB	35.73	35.73	0.00	0.00	35.73	SINGLE PUR NAV
22690	MD	HONGA R TAR BAY MD	NAB	715.48	715.48	0.00	0.00	715.48	SINGLE PUR NAV
73388	MD	ISLAND CK ST. GEO IS MD	NAB	0.91	0.91	0.00	0.00	0.91	SINGLE PUR NAV
73389	MD	KNAPPS NARROWS	NAB	404.50	404.50	0.00	0.00	404.50	SINGLE PUR NAV
40025	MD	MUDDY HOOK/TYLER COVES MD	NAB	9.47	9.47	0.00	0.00	9.47	SINGLE PUR NAV
73364	MD	NANTICOKE AT NANTICOKE	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73349	MD	NANTICOKE RV DE MD	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
27009	MD	NORTHEAST RVR MD	NAB	27.74	27.74	0.00	0.00	27.74	SINGLE PUR NAV
73367	MD	OCEAN CTY HBR SNPXENT BY	NAB	125.28	125.28	0.00	0.00	125.28	SINGLE PUR NAV
73370	MD	POCOMOKE RIVER MD	NAB	0.57	0.57	0.00	0.00	0.57	SINGLE PUR NAV
73374	MD	RHODES PT TO TYLERTON MD	NAB	-38.95	-38.95	0.00	0.00	-38.95	SINGLE PUR NAV
87544	MD	SHALLOW CREEK, MD	NAB	25.00	25.00	0.00	0.00	25.00	SINGLE PUR NAV
40108	MD	TILGHMAN IS HBR MD	NAB	36.83	36.83	0.00	0.00	36.83	SINGLE PUR NAV
73360	MD	TRED AVON RVR MD	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73362	MD	TWITCH CV THOROFARER MD	NAB	115.05	115.05	0.00	0.00	115.05	SINGLE PUR NAV
73366	MD	WICOMICO RVR MD	NAB	123.46	123.46	0.00	0.00	123.46	SINGLE PUR NAV
		<b>TOTAL</b>		<b>1307.54</b>	<b>1307.54</b>	<b>0.00</b>	<b>0.00</b>	<b>1307.54</b>	
		<b>NAME</b>							
339	ME	CREIGHTON HBR ME	NED	79.13	79.13	0.00	0.00	79.13	SINGLE PUR NAV
39054	ME	JOSIAS R ME	NED	1.91	1.91	0.00	0.00	1.91	SINGLE PUR NAV
8900	ME	KENNEBUNK RVR ME	NED	35.84	35.84	0.00	0.00	35.84	SINGLE PUR NAV
15640	ME	ROYAL RVR ME	NED	194.84	194.84	0.00	0.00	194.84	SINGLE PUR NAV
15860	ME	SACO RVR ME	NED	0.19	0.19	0.00	0.00	0.19	SINGLE PUR NAV

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PH#	STATE	NAME	DIV/ DIST	TOTAL NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
21800	ME	SCARBORO RIVER, ME	NED	36.24	36.24	0.00	0.00	SINGLE PUR NAV
8193	ME	SESUIT HBR	NED	132.59	132.59	0.00	0.00	SINGLE PUR NAV
387	ME	UNION RIVER, ME	NED	19.99	19.99	0.00	0.00	SINGLE PUR NAV
39023	ME	WELLS HBR ME	NED	32.17	32.17	0.00	0.00	SINGLE PUR NAV
72501	ME	YORK HARBOR, ME	NED	585.59	585.59	0.00	0.00	SINGLE PUR NAV
		<b>TOTAL</b>		<b>1118.49</b>	<b>1118.49</b>	<b>0.00</b>	<b>0.00</b>	<b>1118.49</b>
<hr/>								
<b>MICHIGAN</b>								
46063	MI	ARCADIA HBR MI	NCE	124.33	124.33	0.00	0.00	124.33
76062	MI	BAY PORT HARBOR, MI	NCE	0.43	0.43	0.00	0.00	0.43
1410	MI	BIG BAY HBR MI	NCE	0.50	0.50	0.00	0.00	0.50
1640	MI	BLACK R UPR PEN	NCE	1.24	1.24	0.00	0.00	SINGLE PUR NAV
87750	MI	BOLLES HARBOR MI	NCE	29.58	29.58	0.00	0.00	SINGLE PUR NAV
74199	MI	CASEVILLE HARBOR MI	NCE	221.72	221.72	0.00	0.00	SINGLE PUR NAV
3490	MI	CLINTON RIV MI	NCE	2.95	2.95	0.00	0.00	2.95
22870	MI	EAGLE HBR MI	NCE	4.00	4.00	0.00	0.00	SINGLE PUR NAV
6730	MI	GRAND TRAVERSE HBR MI	NCE	3.57	3.57	0.00	0.00	SINGLE PUR NAV
46103	MI	GRELICKVILLE HARBOR, MI	NCE	18.67	18.67	0.00	0.00	SINGLE PUR NAV
74208	MI	HAMMOND BAY HBR MI	NCE	0.14	0.14	0.00	0.00	0.14
53550	MI	HARRISVILLE HARBOR MI	NCE	-0.40	-0.40	0.00	0.00	-0.40
48140	MI	INLAND ROUTE MICHIGAN	NCE	38.18	38.18	0.00	0.00	SINGLE PUR NAV
9210	MI	LAC LA BELLE HBR MI	NCE	0.00	0.00	0.00	0.00	SINGLE PUR NAV
46018	MI	LELAND HBR MI	NCE	288.80	288.80	0.00	0.00	288.80
74006	MI	LEXINGTON HARBOR MI	NCE	178.32	178.32	0.00	0.00	SINGLE PUR NAV
73909	MI	LEXINGTON HBR MIT SHR DAM	NCE	97.00	97.00	0.00	0.00	97.00
9890	MI	LITTLE LAKE HBR MI	NCE	69.24	69.24	0.00	0.00	69.24

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

FWI	STATE	NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
1020	MI	NEW BUFFALO HBR MI	NCE	359.89	359.89	0.00	0.00	359.89	SINGLE PUR NAV
46039	MI	PORT SANILAC HBR MI	NCE	137.50	137.50	0.00	0.00	137.50	SINGLE PUR NAV
14410	MI	PORT SANILAC HBR MIT SHR D	NCE	61.26	61.26	0.00	0.00	61.26	SINGLE PUR NAV
74213	MI	PT AUSTIN HBR MI	NCE	0.13	0.13	0.00	0.00	0.13	SINGLE PUR NAV
14220	MI	PT LOOKOUT HBR MI	NCE	2.38	2.38	0.00	0.00	2.38	SINGLE PUR NAV
16390	MI	SAUGATUCK HBR MI	NCE	220.81	220.81	0.00	0.00	220.81	SINGLE PUR NAV
76061	MI	SEBEWAING RIVER MI	NCE	467.91	467.91	0.00	0.00	467.91	SINGLE PUR NAV
17180	MI	SOUTH HAVEN HBR MI	NCE	1.70	1.70	0.00	0.00	1.70	SINGLE PUR NAV
17181	MI	SOUTH HAVEN HBR MIT SHR DM	NCE	0.04	0.04	0.00	0.00	0.04	SINGLE PUR NAV
74019	MI	TAWAS BAY HARBOR, MI	NCE	0.90	0.90	0.00	0.00	0.90	SINGLE PUR NAV
		<b>TOTAL</b>		<b>2346.79</b>	<b>2346.79</b>	<b>0.00</b>	<b>0.00</b>	<b>2346.79</b>	
<hr/>									
<b>MINNESOTA</b>									
11310	MN	MINNESOTA RIVER MN	NCS	264.03	264.03	0.00	0.00	264.03	SINGLE PUR NAV
88809	MN	RED WING COMMERCIAL HBR	NCS	16.84	16.84	0.00	0.00	16.84	SINGLE PUR NAV
88807	MN	ST. PAUL SML BT HBR, MN	NCS	45.00	45.00	0.00	0.00	45.00	SINGLE PUR NAV
48011	MN	WARROAD HBR MN	NCS	233.46	233.46	0.00	0.00	233.46	SINGLE PUR NAV
88816	MN	WINONA SMALL BOAT HBR	NCS	23.00	23.00	0.00	0.00	23.00	SINGLE PUR NAV
87343	MN	ZIPPEL BAY SW BOAT HBR, MN	NCS	0.06	0.06	0.00	0.00	0.06	SINGLE PUR NAV
		<b>TOTAL</b>		<b>582.39</b>	<b>582.39</b>	<b>0.00</b>	<b>0.00</b>	<b>582.39</b>	
<hr/>									
<b>MISSOURI</b>									
87092	MO	CARUTHERSVILLE HBR MO	LMM	155.10	155.10	0.00	0.00	155.10	SINGLE PUR NAV
33012	MO	NEW MADRID HBR MO	LMM	167.69	167.69	0.00	0.00	167.69	SINGLE PUR NAV
87404	MO	SOUTHEAST MO PORT, MS R, MO	LMS	271.45	271.45	0.00	0.00	271.45	SINGLE PUR NAV
		<b>TOTAL</b>		<b>594.24</b>	<b>594.24</b>	<b>0.00</b>	<b>0.00</b>	<b>594.24</b>	

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PRJ#	STATE	NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
98 <b>MISSISSIPPI</b>	1520	MS BILOXI HBR MS	SAM	284.01	284.01	0.00	0.00	284.01	SINGLE PUR NAV
	20600	MS CADET BAYOU MS	SAM	301.33	301.33	0.00	0.00	301.33	SINGLE PUR NAV
	87249	MS CLAIBORNE CO PORT MS	LMK	133.50	133.50	0.00	0.00	133.50	SINGLE PUR NAV
	493	MS MOUTH OF YAZOO RIVER, MS	LMK	147.31	147.31	0.00	0.00	147.31	SINGLE PUR NAV
	99982	MS MR&T-GREENVILLE HBR	LMV	170.00	170.00	0.00	0.00	170.00	SINGLE PUR NAV
	99983	MS MR&T-VICKSBURG HBR	LMV	209.00	209.00	0.00	0.00	209.00	SINGLE PUR NAV
	74564	MS PASS CHRISTIAN HBR MS	SAM	66.59	66.59	0.00	0.00	66.59	SINGLE PUR NAV
	87072	MS ROSEDALE HBR MS	LMK	142.44	142.44	0.00	0.00	142.44	SINGLE PUR NAV
	20160	MS WOLF & JORDAN RVPS, MS	SAM	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
	20350	MS YAZOO RIVER MS	LMK	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
<b>TOTAL</b>				<b>1454.88</b>	<b>1454.88</b>	<b>0.00</b>	<b>0.00</b>	<b>1454.88</b>	
<b>KENTUCKY</b>									
1290	NC BELHAVEN HBR NC	SAW	40.37	40.37	0.00	0.00	0.00	40.37	SINGLE PUR NAV
73752	NC CHOWAN R NC	NAO	0.00	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
26060	NC DRUM INLET NC	SAW	72.06	72.06	0.00	0.00	0.00	72.06	SINGLE PUR NAV
10020	NC LOCKWD FOLLY R NC	SAW	658.73	658.73	0.00	0.00	0.00	658.73	SINGLE PUR NAV
10580	NC MANTEO BAY NC	SAW	3309.61	3309.61	0.00	0.00	0.00	3309.61	SINGLE PUR NAV
74615	NC PAMILICO & TARR NC	SAW	132.34	132.34	0.00	0.00	0.00	132.34	SINGLE PUR NAV
22510	NC ROANOKE RVR NC	SAW	78.00	78.00	0.00	0.00	0.00	78.00	SINGLE PUR NAV
15490	NC ROLLINSON CH NC	SAW	0.31	0.31	0.00	0.00	0.00	0.31	SINGLE PUR NAV
16800	NC SILVER LKE HBR NC	SAW	45.44	45.44	0.00	0.00	0.00	45.44	SINGLE PUR NAV
74632	NC WW CONN PAMLISD BEAU HB	SAW	12.71	12.71	0.00	0.00	0.00	12.71	SINGLE PUR NAV
<b>TOTAL</b>				<b>4349.57</b>	<b>4349.57</b>	<b>0.00</b>	<b>0.00</b>	<b>4349.57</b>	

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PWI	STATE	NAME	DMY DIST.	TOTAL NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	FREIGHT TIRE
<b>NEW HAMPSHIRE</b>								
39063	NH	HAMPTON HBR NH	NED	3.05	3.05	0.00	0.00	3.05
509	NH	LITTLE HARBOR, NH	NED	22.82	22.82	0.00	0.00	22.82
		<b>TOTAL</b>		<b>25.87</b>	<b>25.87</b>	<b>0.00</b>	<b>0.00</b>	<b>25.87</b>
<b>NEW JERSEY</b>								
950	NJ	BARNEGAT INLET NJ	NAP	1211.58	1211.58	0.00	0.00	1211.58
87211	NJ	CEDAR CREEK	NAP	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73626	NJ	CHEESEQUAKE CREEK, NJ	NAN	10.80	10.80	0.00	0.00	SINGLE PUR NAV
3540	NJ	COHANSEY RIVER NJ	NAP	0.00	0.00	0.00	0.00	SINGLE PUR NAV
8980	NJ	KEYPORT HBR NJ	NAN	0.49	0.49	0.00	0.00	SINGLE PUR NAV
10450	NJ	MANASQUAN RVR NJ	NAP	324.94	324.94	0.00	0.00	SINGLE PUR NAV
10410	NJ	MATAWAN CREEK NJ	NAN	0.80	0.80	0.00	0.00	SINGLE PUR NAV
73841	NJ	MAURICE RIVER NJ	NAP	617.93	617.93	0.00	0.00	SINGLE PUR NAV
8190	NJ	NJ IWW	NAP	2507.44	2507.44	0.00	0.00	2507.44
73892	NJ	RACCOON CRK NJ	NAP	0.00	0.00	0.00	0.00	SINGLE PUR NAV
41007	NJ	SHARK RVR NJ	NAN	70.41	70.41	0.00	0.00	70.41
41035	NJ	SHOAL HBR CMPTN CK NJ	NAN	113.39	113.39	0.00	0.00	SINGLE PUR NAV
16780	NJ	SHREWSBURY RVR NJ	NAN	611.26	611.26	0.00	0.00	SINGLE PUR NAV
73894	NJ	TOMS RIVER, NJ	NAP	1.68	1.68	0.00	0.00	1.68
18580	NJ	TUCKERTON CREEK	NAP	5.83	5.83	0.00	0.00	SINGLE PUR NAV
		<b>TOTAL</b>		<b>5476.55</b>	<b>5476.55</b>	<b>0.00</b>	<b>0.00</b>	<b>5476.55</b>
<b>NEW YORK</b>								
41057	NY	BRONX RVR NY	NAN	39.33	39.33	0.00	0.00	39.33

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PROJ	STATE	NAME	DIV/ DIST	TOTAL NAVIGATION COST	OTHER JOINT USE COST	RECOVERY COST	PROTECT TYPE	
41022	NY	BROWN CK NY	NAN	0.33	0.00	0.00	0.33	SINGLE PUR NAV
73920	NY	CATTARAUGUS CRK NY	NCB	5.50	5.50	0.00	5.50	SINGLE PUR NAV
5220	NY	E ROCKAWAY INLET NY	NAN	2733.54	2733.54	0.00	2733.54	SINGLE PUR NAV
41004	NY	EAST CHESTER CRK NY	NAN	39.63	39.63	0.00	39.63	SINGLE PUR NAV
5880	NY	FIRE INLT TO JONES NY	NAN	250.17	250.17	0.00	250.17	MULTI TWO ALLOC
73696	NY	GLEN COVE CRK NY	NAN	437.74	437.74	0.00	437.74	SINGLE PUR NAV
8220	NY	IRONDEQUOIT BAY, NY	NCB	0.00	0.00	0.00	0.00	SINGLE PUR NAV
41006	NY	JONES INLT NY	NAN	4620.10	4620.10	0.00	4620.10	SINGLE PUR NAV
9340	NY	LAKE MONTAUK HBR NY	NAN	960.53	960.53	0.00	960.53	SINGLE PUR NAV
41082	NY	MATTITUCK HBR NY	NAN	1003.18	1003.18	0.00	1003.18	SINGLE PUR NAV
11250	NY	MILTON HBR NY	NAN	0.03	0.03	0.00	0.03	SINGLE PUR NAV
12200	NY	NRWS LKE CHAMPLAIN NY VT	NAN	46.33	46.33	0.00	46.33	SINGLE PUR NAV
12980	NY	OAK ORCHARD HBR NY	NCB	0.18	0.18	0.00	0.18	SINGLE PUR NAV
44066	NY	OLCOTT HBR NY	NCB	4.23	4.23	0.00	4.23	SINGLE PUR NAV
73747	NY	PORT CHESTER HBR NY	NAN	44.60	44.60	0.00	44.60	SINGLE PUR NAV
73705	NY	RONDOUT HARBOR NY	NAN	0.23	0.23	0.00	0.23	SINGLE PUR NAV
73644	NY	SHINNECOCK INLET NY	NAN	49.75	49.75	0.00	49.75	SINGLE PUR NAV
87433	NY	STURGEON POINT, NY	NCB	66.40	66.40	0.00	66.40	SINGLE PUR NAV
41003	NY	WESTCHESTER CK NY	NAN	39.94	39.94	0.00	39.94	SINGLE PUR NAV
73938	NY	WILSON HBR NY	NCB	0.23	0.23	0.00	0.23	SINGLE PUR NAV
<b>TOTAL</b>				<b>16341.97</b>	<b>16341.97</b>	<b>0.00</b>	<b>16341.97</b>	
<b>OHIO</b>								
21540	OH	PORT CLINTON HBR OH	NCB	0.00	0.00	0.00	0.00	SINGLE PUR NAV
44072	OH	ROCKY R HBR OH	NCB	62.45	62.45	0.00	62.45	SINGLE PUR NAV
44003	OH	VERMILLION HBR OH	NCB	158.71	158.71	0.00	158.71	SINGLE PUR NAV

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PWI	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROTECT
									SINGLE PUR NAV
74025	OH	WEST HEP, OH		NCB	0.00	0.00	0.00	0.00	0.00
		TOTAL			221.16	221.16	0.00	0.00	221.16
<b>OREGON</b>									
3130	OR	CHEMCO RIVER	NPP	463.98	463.98	0.00	0.00	463.98	SINGLE PUR NAV
23080	OR	COLUM. R. BTN CHNK SD IS	NPP	1037.17	1037.17	0.00	0.00	1037.17	SINGLE PUR NAV
3570	OR	COLUMBIAN BAKER BAY	NPP	1.60	1.60	0.00	0.00	1.60	SINGLE PUR NAV
3900	OR	COQUILLE R OR	NPP	160.93	160.93	0.00	0.00	160.93	SINGLE PUR NAV
4610	OR	DEPOE BAY OR	NPP	39.37	39.37	0.00	0.00	39.37	SINGLE PUR NAV
15600	OR	ROGUE RVR HBR GOLD BH	NPP	998.18	998.18	0.00	0.00	998.18	SINGLE PUR NAV
20300	OR	YACQUINA RVR OR	NPP	328.10	328.10	0.00	0.00	328.10	SINGLE PUR NAV
		TOTAL		3079.33	3079.33	0.00	0.00	3079.33	
<b>RHODE ISLAND</b>									
556	RI	BULLOCKS PT CVE RI	NED	-8.80	-8.80	0.00	0.00	-8.80	SINGLE PUR NAV
562	RI	LITTLE NARRAGANSETT BAY	NED	174.95	174.95	0.00	0.00	174.95	SINGLE PUR NAV
87008	RI	PATCHOGUE RVR RI CONN	NED	6.52	6.52	0.00	0.00	6.52	SINGLE PUR NAV
		TOTAL		172.67	172.67	0.00	0.00	172.67	
<b>SOUTH CAROLINA</b>									
87533	SC	BROOKGREEN GARDEN CANAL	SAC	0.02	0.02	0.00	0.00	0.02	SINGLE PUR NAV
87088	SC	FOLLY RVR SC	SAC	252.12	252.12	0.00	0.00	252.12	SINGLE PUR NAV
88855	SC	JEREMY CREEK SC	SAC	0.02	0.02	0.00	0.00	0.02	SINGLE PUR NAV
9930	SC	LITTLE RIVER INLET SC	SAC	26.65	26.65	0.00	0.00	26.65	SINGLE PUR NAV
12030	SC	MURRELLS INLET SC	SAC	40.01	40.01	0.00	0.00	40.01	SINGLE PUR NAV
		TOTAL		318.82	318.82	0.00	0.00	318.82	

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

FWI	STATE	NAME	DIV DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT
									TYPE
TENNESSEE									
99981	TN	MR&T-MICKELLER LK HBR	LMV	1930.00	1930.00	0.00	0.00	1930.00	SINGLE PUR NAV
20150	TN	WOLF RVR HBR TN	LMM	314.59	314.59	0.00	0.00	314.59	SINGLE PUR NAV
		TOTAL		2244.59	2244.59	0.00	0.00	2244.59	
TEXAS									
1350	TX	BENBROOK LAKE TX	SWF	1733.20	117.30	1615.90	0.00	117.30	MULTI W ALLOC
2810	TX	CEDAR BAYOU TX	SWG	626.82	626.82	0.00	0.00	626.82	SINGLE PUR NAV
6760	TX	GRAPEVINE LAKE TX	SWF	1950.00	19.90	1930.10	0.00	19.90	MULTI W ALLOC
18510	TX	TRINITY RIVER, TX	SWG	701.70	701.70	0.00	0.00	701.70	SINGLE PUR NAV
		TOTAL		5611.72	1465.72	3516.00	0.00	1465.72	
VIRGINIA									
30580	VA	APPOMATTOX RIVER VA	NAO	54.81	54.81	0.00	0.00	54.81	SINGLE PUR NAV
27028	VA	BLACKWATER RIVER, VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
582	VA	BROAD CREEK VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
10890	VA	CHINCOTEAQUE BAY VA	NAO	11.73	11.73	0.00	0.00	11.73	SINGLE PUR NAV
5841	VA	CHINCOTEAQUE HBR REG VA	NAO	9.99	9.99	0.00	0.00	9.99	SINGLE PUR NAV
76106	VA	CHINCOTEAQUE INLET VA	NAO	816.45	816.45	0.00	0.00	816.45	SINGLE PUR NAV
585	VA	CRANES CREEK VA	NAO	119.95	119.95	0.00	0.00	119.95	SINGLE PUR NAV
75117	VA	DEEP CR NEWPORT NEWS VA	NAO	594.47	594.47	0.00	0.00	594.47	SINGLE PUR NAV
780	VA	GREENVALE CK, LANE CO., VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73776	VA	HORN HARBOR, VA	NAO	9.26	9.26	0.00	0.00	9.26	SINGLE PUR NAV
20920	VA	HOSKINS CREEK, VA	NAO	324.79	324.79	0.00	0.00	324.79	SINGLE PUR NAV
73778	VA	LAFAYETTE RIVER, VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV

TABLE 21S

**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX  
NAVIGATION COST RECOVERY ANALYSIS BY STATE  
OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (ACTUAL)**

PW#	STATE	NAME	DIV/ DIST	TOTAL COST	NAVIGATION COST	OTHER COST	JOINT USE COST	RECOVERY COST	PROJECT TYPE
9980	VA	LITTLE W/COMICO RVR VA	NAB	37.00	37.00	0.00	0.00	37.00	SINGLE PUR NAV
10310	VA	LYNNHAVEN INLET VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
592	VA	MONROE BAY CK VA	NAB	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73784	VA	NANSEMOND RIVER VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73542	VA	NEABSCO CK VA	NAB	35.85	35.85	0.00	0.00	35.85	SINGLE PUR NAV
21640	VA	NEWPORT NEWS CREEK	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73789	VA	NOTTOWAY RIVER	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73792	VA	OYSTER CREEK VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73793	VA	PAGAN RIVER, VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
76011	VA	PARKER CRK VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
795	VA	QUEENS CREEK VA	NAO	161.68	161.68	0.00	0.00	161.68	SINGLE PUR NAV
14770	VA	QUINBY CRK VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
14850	VA	RAPPAHANNOCK R VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
87455	VA	RUDEE INLET, VIRGINIA	NAO	442.73	442.73	0.00	0.00	442.73	SINGLE PUR NAV
42001	VA	STARLINGS CREEK VA	NAO	244.28	244.28	0.00	0.00	244.28	SINGLE PUR NAV
27650	VA	TANGIER CHANNEL VA	NAO	529.10	529.10	0.00	0.00	529.10	SINGLE PUR NAV
76107	VA	TYLERS BEACH VA	NAO	32.09	32.09	0.00	0.00	32.09	SINGLE PUR NAV
605	VA	WHITINGS CREEK, MIDDLE	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73801	VA	WILLOUGHBY CHANNEL, VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
73802	VA	WINTER HARBOR VA	NAO	0.00	0.00	0.00	0.00	0.00	SINGLE PUR NAV
19550	VA	WW COAST OF VA	NAO	1371.59	1371.59	0.00	0.00	1371.59	SINGLE PUR NAV
		<b>TOTAL</b>		<b>4795.77</b>	<b>4795.77</b>	<b>0.00</b>	<b>0.00</b>	<b>4795.77</b>	<b>0.00</b>
VERMONT	VT	BURLINGTON HARBOR, VT	NAN	0.49	0.49	0.00	0.00	0.49	SINGLE PUR NAV
		<b>TOTAL</b>		<b>0.49</b>	<b>0.49</b>	<b>0.00</b>	<b>0.00</b>	<b>0.49</b>	

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO INLAND WATERWAY FUEL TAX**  
**NAVIGATION COST RECOVERY ANALYSIS BY STATE**  
**OPERATION AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (ACTUAL)**

PWI	STATE	NAME	DISI	TOTAL NAVIGATION COST	OTHER JOINT USE COST	RECOVERY COST	PROJECT MVE
WASHINGTON							
14760	WA	QUILLAYUTE RIVER	NPS	4373.19	4373.19	0.00	4373.19
17870	WA	SWINOMISH CHANNEL	NPS	0.73	0.73	0.00	0.73
		TOTAL		4373.92	4373.92	0.00	4373.92
MISCONSRIN							
74177	WI	ALGOMA HARBOR WI	NCE	205.74	205.74	0.00	205.74
612	WI	BIG SUAMICO HARBOR	NCE	0.20	0.20	0.00	0.20
3970	WI	CORNUCOPIA HBR WI	NCE	4.98	4.98	0.00	4.98
6610	WI	FOX RIVER WI	NCE	2117.30	2117.30	0.00	2117.30
74189	WI	PENSAUKEE HBR WI	NCE	0.03	0.03	0.00	0.03
16500	WI	SAXON HBR WI	NCE	0.00	0.00	0.00	0.00
		TOTAL		2228.25	2228.25	0.00	2228.25
WEST VIRGINIA							
10222	WV	BIG SANDY HARBOR	ORH	1060.34	1060.34	0.00	1060.34
88833	WV	ELK RIVER HARBOR	ORH	0.60	0.60	0.00	0.60
10221	WV	PORTSMOUTH HARBOR	ORH	0.00	0.00	0.00	0.00
		TOTAL		1060.94	1060.94	0.00	1060.94
		TOTAL ALL STATES		96180.77	7428.17	21778.00	6440.74
							74646.63



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX F - Deep Draft Navigation Projects, Navigation  
Cost Recovery Analysis by Segment,  
O&M Expenditures for FY 1996  
(Estimated - President's Budget).**

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT RECOVERY USE	RECOVERY AMOUNT	TYPE	PROJECT CWS NO
4	MISS R-B RGE TO GULFLA	LMN	51837.00	51837.00	0.00	0.00	51836.00	SINGLE PUR NAV	68
4	ATCH R MORGAN CITY-GULGLA	LMN	12786.00	12786.00	0.00	0.00	12786.00	SINGLE PUR NAV	680
4	BRAZOS IS TX	SWG	1038.00	1038.00	0.00	0.00	1038.00	SINGLE PUR NAV	1990
4	CALCASIEU R PASS LA	LMN	4095.00	4095.00	0.00	0.00	4095.00	SINGLE PUR NAV	2440
4	FREREPORT HBR TX	SWG	2870.00	2870.00	0.00	0.00	2870.00	SINGLE PUR NAV	6170
4	GALVESTON HBR CH TX	SWG	136.00	136.00	0.00	0.00	136.00	SINGLE PUR NAV	6340
4	HOUma HAV CANAL LA	LMN	3897.00	3897.00	0.00	0.00	3897.00	SINGLE PUR NAV	7760
4	HOUSTON SHIP CHNL	SWG	5823.00	5823.00	0.00	0.00	5823.00	SINGLE PUR NAV	7780
4	NATAGORDA SHIP CHNL TX	SWG	5145.00	5145.00	0.00	0.00	5145.00	SINGLE PUR NAV	10810
4	MERMENTAU RIVER LA	LMN	2081.00	2081.00	0.00	0.00	2081.00	MULTI TWO ALLOC	11030
4	MISS R-GULF OUTLET LA	LMN	12054.00	12054.00	0.00	0.00	12054.00	SINGLE PUR NAV	11410
4	CORPUS CHRISTI CH TX	SWG	2190.00	2190.00	0.00	0.00	2190.00	SINGLE PUR NAV	14340
4	SABINE-NECHES WW TX	SWG	11946.00	11946.00	0.00	0.00	11946.00	SINGLE PUR NAV	15780
4	TEXAS CITY TX	SWG	1525.00	1525.00	0.00	0.00	1525.00	SINGLE PUR NAV	18130
4			117423.00	117423.00	0.00	0.00	117423.00		
5	CHARLOTTE HARBOR FL	SAJ	3275.00	3275.00	0.00	0.00	3275.00	SINGLE PUR NAV	3000
5	GULFPORT HARBOR MS	SAM	2876.00	2876.00	0.00	0.00	2876.00	SINGLE PUR NAV	7150
5	MOBILE HBR AL	SAM	17780.00	17780.00	0.00	0.00	17780.00	SINGLE PUR NAV	11670
5	PANAMA CITY HBR FL	SAM	717.00	717.00	0.00	0.00	717.00	SINGLE PUR NAV	13640
5	PASCAGOULA HBR MS	SAM	2998.00	2998.00	0.00	0.00	2998.00	SINGLE PUR NAV	13680
5	PT ST. JOE HBR FL	SAM	72.00	72.00	0.00	0.00	72.00	SINGLE PUR NAV	14390
5	TAMPA HARBOR FL	SAJ	3744.00	3744.00	0.00	0.00	3744.00	SINGLE PUR NAV	17960
6			31462.00	31462.00	0.00	0.00	31462.00		
24	GT SODUS BAY HBR NY	NCB	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV	6860
24	OSWEGO HBR NY	NCB	496.00	496.00	0.00	0.00	496.00	SINGLE PUR NAV	13440
24			506.00	506.00	0.00	0.00	506.00		
25	ASUTADULA HBR OH	NCB	1088.00	1088.00	0.00	0.00	1088.00	SINGLE PUR NAV	650
25	BL ROCK CH TONAWANDA HBR	NCB	3205.00	3205.00	0.00	0.00	3205.00	SINGLE PUR NAV	1660

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEC NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
25	BUFFALO	NCB	455.00	455.00	0.00	0.00	455.00	SINGLE PUR NAV	2140
25	CLEVELAND HBR OH	NCB	13038.00	13038.00	0.00	0.00	13038.00	SINGLE PUR NAV	3430
25	CONNEAUT HBR OH	NCB	655.00	655.00	0.00	0.00	655.00	SINGLE PUR NAV	3770
25	DETROIT RVR MI	NCE	4729.00	4729.00	0.00	0.00	4729.00	SINGLE PUR NAV	4710
25	ERIE HBR PA	NCB	468.00	468.00	0.00	0.00	468.00	SINGLE PUR NAV	5600
25	HURON HBR OH	NCB	820.00	820.00	0.00	0.00	820.00	SINGLE PUR NAV	7920
25	LORAIN HBR OH	NCB	407.00	407.00	0.00	0.00	407.00	SINGLE PUR NAV	10060
25	MONROE HBR MI	NCE	772.00	772.00	0.00	0.00	772.00	SINGLE PUR NAV	11760
25	ROUGE RVR MI	NCE	297.00	297.00	0.00	0.00	297.00	SINGLE PUR NAV	15590
25	SANDUSKY HBR OH	NCB	1030.00	1030.00	0.00	0.00	1030.00	SINGLE PUR NAV	16260
25	TOLEDO HBR OH	NCB	3502.00	3502.00	0.00	0.00	3502.00	SINGLE PUR NAV	18280
25	DUNKIRK HBR NY	NCB	309.00	309.00	0.00	0.00	309.00	SINGLE PUR NAV	50600
25			30775.00	30775.00	0.00	0.00	30775.00		
26	CHS-LKE ST CLAIR MI	NCE	245.00	245.00	0.00	0.00	245.00	SINGLE PUR NAV	2940
26	HARBOR BEACH HBR MI	NCE	77.00	77.00	0.00	0.00	77.00	SINGLE PUR NAV	7300
26	ST CLAIR RVR MI	NCE	868.00	868.00	0.00	0.00	868.00	SINGLE PUR NAV	17300
26	ST MARYS R MI	NCE	14962.00	9175.00	2487.00	3300.00	9505.00	MULTI WO ALLOC	17380
26	SAGINAW RVR MI	NCE	1802.00	1802.00	0.00	0.00	1802.00	SINGLE PUR NAV	57420
26	ALPENA HBR MI	NCE	218.00	218.00	0.00	0.00	218.00	SINGLE PUR NAV	74196
26			18172.00	18172.00	2487.00	3300.00	12756.00		
27	BURNS WW HBR IN	NCC	1545.00	1545.00	0.00	0.00	1545.00	SINGLE PUR NAV	2250
27	CALUMET HBR R IL	NCC	600.00	600.00	0.00	0.00	600.00	SINGLE PUR NAV	2410
27	CHARLEVOIX	NCE	118.00	118.00	0.00	0.00	118.00	SINGLE PUR NAV	2990
27	CHICAGO RVR IL	NCC	610.00	610.00	0.00	0.00	610.00	SINGLE PUR NAV	3810
27	FRANFORT HBR MI	NCE	372.00	372.00	0.00	0.00	372.00	SINGLE PUR NAV	6130
27	GD HAVEN HBR MI	NCE	739.00	739.00	0.00	0.00	739.00	SINGLE PUR NAV	6670
27	GRAND HAVEN HBR MIT SHR DM	NCE	78.00	78.00	0.00	0.00	78.00	SINGLE PUR NAV	6671
27	GREEN BAY HBR MI	NCE	1029.00	1029.00	0.00	0.00	1029.00	SINGLE PUR NAV	6910
27	HOLLAND HARBOR MI	NCE	358.00	358.00	0.00	0.00	358.00	SINGLE PUR NAV	7610

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (EST. PRES)**

SEC NO	PRCJCT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWMS NO
27	HOLLAND HBR MIT SHR DAM MI	NCE	59.00	59.00	0.00	0.00	59.00	SINGLE PUR NAV	7611
27	KENOSHA HARBOR WI	NCE	130.00	130.00	0.00	0.00	130.00	SINGLE PUR NAV	8910
27	LUDINGTON HARBOR MI	NCE	495.00	495.00	0.00	0.00	495.00	SINGLE PUR NAV	10270
27	MANISTEE HARBOR MI	NCE	440.00	440.00	0.00	0.00	440.00	SINGLE PUR NAV	10480
27	MANITOWOC HBR WI	NCE	257.00	257.00	0.00	0.00	257.00	SINGLE PUR NAV	10510
27	MICHIGAN CTY HBR IN	NCC	540.00	540.00	0.00	0.00	540.00	SINGLE PUR NAV	11060
27	MILWAUKEE HBR WI	NCE	3123.00	3123.00	0.00	0.00	3123.00	SINGLE PUR NAV	11270
27	MUSKEGON HBR MO	NCE	694.00	694.00	0.00	0.00	694.00	SINGLE PUR NAV	12060
27	MUSKEGON HARBOR MITIGATION	NCE	111.00	111.00	0.00	0.00	111.00	SINGLE PUR NAV	12061
27	PENTWATER HBR MI	NCE	799.00	799.00	0.00	0.00	799.00	SINGLE PUR NAV	13850
27	ST. JOSEPH HBR MI	NCE	495.00	495.00	0.00	0.00	495.00	SINGLE PUR NAV	17350
27	ST. JOSEPH HBR MIT SHR DAM	NCE	585.00	585.00	0.00	0.00	585.00	SINGLE PUR NAV	17351
27	SURGEON B&L MICH CAN, WI	NCE	2831.00	2831.00	0.00	0.00	2831.00	SINGLE PUR NAV	17660
27	INDIANA HBR IN	NCC	320.00	320.00	0.00	0.00	320.00	SINGLE PUR NAV	18120
27	TWO RVR'S HBR WI	NCE	760.00	760.00	0.00	0.00	760.00	SINGLE PUR NAV	18710
27	WAUKESHA HBR IL	NCC	970.00	970.00	0.00	0.00	970.00	SINGLE PUR NAV	19560
27	WHITE LAKE HBR MI	NCE	434.00	434.00	0.00	0.00	434.00	SINGLE PUR NAV	19810
27	CHICAGO HBR IL	NCC	2545.00	2545.00	0.00	0.00	2545.00	SINGLE PUR NAV	45009
27	MENOMINEE HBR MI	NCE	32.00	32.00	0.00	0.00	32.00	SINGLE PUR NAV	15044
27	SHEBUYGAN HBR WI	NCE	883.00	883.00	0.00	0.00	883.00	SINGLE PUR NAV	66700
27	KEWAUNEE HARBOR WI	NCE	300.00	300.00	0.00	0.00	300.00	SINGLE PUR NAV	76050
27			22252.00	22252.00	0.00	0.00	22252.00		
28	DULUTH-SUPERIOR MN	NCE	3396.00	2971.00	425.00	0.00	2971.00	SINGLE PUR NAV	5050
28	KIENEENAW WW MI	NCE	1641.00	1641.00	0.00	0.00	1641.00	SINGLE PUR NAV	8960
28	ONTONAGON HBR MI	NCE	455.00	455.00	0.00	0.00	455.00	SINGLE PUR NAV	13330
28	GRAND MARAIS HBR MI	NCE	218.00	218.00	0.00	0.00	218.00	SINGLE PUR NAV	46064
28			5710.00	5285.00	425.00	0.00	5285.00		
29	BALTIMORE HBR DRIFT REMOVL	NAB	455.00	455.00	0.00	0.00	455.00	SINGLE PUR NAV	871
29	BALTIMORE HBR PREV OF OBST	NAB	520.00	520.00	0.00	0.00	520.00	SINGLE PUR NAV	872

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
29	HAMPTON ROADS DRIFT REMOVL	NAO	647.00	647.00	0.00	0.00	647.00	SINGLE PUR NAV	1002
29	BAY RDGE RED HOOK OH NY	NAN	230.00	230.00	0.00	0.00	230.00	SINGLE PUR NAV	1040
29	CAPE COD CNL MA	NED	7399.00	7399.00	688.00	0.00	7399.00	SINGLE PUR NAV	2620
29	DEL RVR BETWN PHILA TREN	NAP	1255.00	1255.00	0.00	0.00	1255.00	SINGLE PUR NAV	4550
29	DEL RVR PA NW PHILA TO S	NAP	18157.00	18157.00	0.00	0.00	18157.00	SINGLE PUR NAV	4570
29	HUDSON R. CHANNEL, NY	NAN	1380.00	1380.00	0.00	0.00	1380.00	SINGLE PUR NAV	7800
29	HUDSON R NY TO ALB (MN)	NAN	1375.00	1375.00	0.00	0.00	1375.00	SINGLE PUR NAV	7810
29	HUDSON R NY TO ALB (O&C)	NAN	1145.00	1145.00	0.00	0.00	1145.00	SINGLE PUR NAV	7820
29	IWW FM DFL R TO CHPKE B D	NAP	16090.00	16090.00	0.00	0.00	16090.00	SINGLE PUR NAV	8160
29	C&D CAN, ST GEORGES BR DE	NAP	14000.00	14000.00	0.00	0.00	14000.00	SINGLE PUR NAV	8215
29	JAMES RVR VA	NAO	1616.00	1616.00	0.00	0.00	1616.00	SINGLE PUR NAV	8430
29	NEW YORK HARBOR NY	NAN	6020.00	6020.00	0.00	0.00	6020.00	SINGLE PUR NAV	12490
29	NEW YORK HBR DRIFT, NY	NAN	4886.00	4886.00	0.00	0.00	4886.00	SINGLE PUR NAV	12500
29	NY NJ CMS NY NJ	NAN	205.00	205.00	0.00	0.00	205.00	SINGLE PUR NAV	12520
29	NORFOLK HBR CHS VA	NAO	5131.00	5131.00	0.00	0.00	5131.00	SINGLE PUR NAV	12801
29	POTOMAC R. DRIFT REMOVL VA	NAB	785.00	785.00	0.00	0.00	785.00	SINGLE PUR NAV	14520
29	HAMPTON ROADS PRE OF OBST	NAO	200.00	200.00	0.00	0.00	200.00	SINGLE PUR NAV	15170
29	SCHULKILL R PA	NAP	1930.00	1930.00	0.00	0.00	1930.00	SINGLE PUR NAV	16550
29	NY HARBOR PREV OF OBSTRUCTION	NAN	740.00	740.00	0.00	0.00	740.00	SINGLE PUR NAV	17760
29	WASHINGTON HBR DC	NAB	35.00	35.00	0.00	0.00	35.00	SINGLE PUR NAV	19500
29	WILMINGTON HBR DEL	NAP	2513.00	2513.00	0.00	0.00	2513.00	SINGLE PUR NAV	20040
29	COLD SPRING INLET	NAP	485.00	485.00	0.00	0.00	485.00	SINGLE PUR NAV	22140
29	BUTTERMILK CH NY	NAN	820.00	820.00	0.00	0.00	820.00	SINGLE PUR NAV	41015
29	EAST RIVER NY	NAN	195.00	195.00	0.00	0.00	195.00	SINGLE PUR NAV	41062
29	DEL RIV PHIL TO CAMDEN NJ	NAP	850.00	850.00	0.00	0.00	850.00	SINGLE PUR NAV	43005
29	JAMAICA BAY NY	NAN	220.00	220.00	0.00	0.00	220.00	SINGLE PUR NAV	54000
29	CH TO NEW PORT NEWS VA	NAO	590.00	590.00	0.00	0.00	590.00	SINGLE PUR NAV	73733
29	THIMBLE SHOAL CH VA	NAO	1355.00	1355.00	0.00	0.00	1355.00	SINGLE PUR NAV	73800
29	BALTIMORE HBR & SOFT CHANN	NAB	13425.00	13425.00	0.00	0.00	13425.00	SINGLE PUR NAV	74955
110			104654.00	104654.00	0.00	0.00	104654.00		

TABLE 1D

**DEEP DRAFT NAVIGATION PROJECTS  
NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
FY 1996 (EST. PRES)**

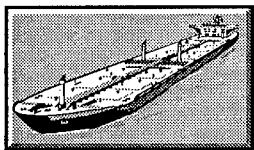
SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	USE	JOINT RECOVERY AMOUNT	TYPE	PROJECT CIVIC NO
30	BEAUFORT HBR NC	SAW	350.00	350.00	0.00	0.00	350.00	SINGLE PUR NAV	1210
30	BRUNSWICK HBR	SAS	3411.00	3411.00	0.00	0.00	3411.00	SINGLE PUR NAV	2080
30	CANAVERAL HARBOR FL	SAJ	4736.00	4736.00	0.00	0.00	4736.00	SINGLE PUR NAV	2520
30	CAPE FEAR R ABOVE WILM NC	SAW	1200.00	986.00	214.00	0.00	986.00	SINGLE PUR NAV	2640
30	CHARLESTON HARBOR SC	SAC	5426.00	5426.00	0.00	0.00	5426.00	SINGLE PUR NAV	2980
30	FERNANDINA HARBOR FLA	SAJ	1623.00	1623.00	0.00	0.00	1623.00	SINGLE PUR NAV	5940
30	FORT PIERCE HARBOR FL	SAJ	712.00	712.00	0.00	0.00	712.00	SINGLE PUR NAV	6260
30	GEORGETOWN HARBOR SC	SAC	3509.00	3509.00	0.00	0.00	3509.00	SINGLE PUR NAV	6480
30	JACKSONVILLE HARBOR FL	SAJ	4119.00	4119.00	0.00	0.00	4119.00	SINGLE PUR NAV	8410
30	MOREHD CTY HBR NC	SAW	3108.00	3108.00	0.00	0.00	3108.00	SINGLE PUR NAV	11810
30	PALM BEACH HBR FL	SAJ	1459.00	1459.00	0.00	0.00	1459.00	SINGLE PUR NAV	13590
30	PORT ROYAL HARBOR SC	SAC	1192.00	1192.00	0.00	0.00	1192.00	SINGLE PUR NAV	14380
30	SHIPYARD RVR SC	SAC	428.00	428.00	0.00	0.00	428.00	SINGLE PUR NAV	16730
30	WILMINGTON BWN NC	SAW	6048.00	6048.00	0.00	0.00	6048.00	SINGLE PUR NAV	20030
30	COOPER R SC	SAC	2469.00	2453.00	16.00	0.00	2453.00	SINGLE PUR NAV	74354
30	MIAMI HBR FL	SAJ	295.00	295.00	0.00	0.00	295.00	SINGLE PUR NAV	74378
30	SAVANNAH HBR	SAS	8377.00	8377.00	0.00	0.00	8377.00	SINGLE PUR NAV	75085
30			48462.00	48462.00	230.00	0.00	48232.00		
31	EVERETT HBR SNOHOMISH RV	NPS	870.00	870.00	0.00	0.00	870.00	SINGLE PUR NAV	5700
31	LK WASHINGTON SHP CNL WA	NPS	6877.00	6421.00	456.00	0.00	6421.00	SINGLE PUR NAV	9400
31	OLYMPIA HBR WA	NPS	12.00	12.00	0.00	0.00	12.00	SINGLE PUR NAV	13320
31	PUGET SOUND ITS TRIB WW	NPS	1155.00	1155.00	0.00	0.00	1155.00	SINGLE PUR NAV	13870
31	SEATTLE HBR WA	NPS	678.00	678.00	0.00	0.00	678.00	SINGLE PUR NAV	67318
31	KENMORE NAVIGATION CH	NPS	202.00	202.00	0.00	0.00	202.00	SINGLE PUR NAV	87153
31			9794.00	9338.00	456.00	0.00	9338.00		
32	COLUMBIA R AT MOTH OR WA	NPP	8013.00	8013.00	0.00	0.00	8013.00	SINGLE PUR NAV	3600
32	COL R BTN VNCR DALLES OR	NPP	420.00	420.00	0.00	0.00	420.00	SINGLE PUR NAV	3620
32	COLMBA LWR WLMT RVR OR	NPP	11017.00	11017.00	0.00	0.00	11017.00	SINGLE PUR NAV	3630
32	SKIPANON CHANNEL OR	NPP	61.00	61.00	0.00	0.00	61.00	SINGLE PUR NAV	16930

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
32	BONNEVILLE LOCK DAM OR WA	NPP	18708.00	4852.00	13936.00	0.00	4852.00	MULTIWALLC	80546
32			38299.00	21363.00	13936.00	0.00	24333.00		
33	COOS BAY OR	NPP	4349.00	4349.00	0.00	0.00	4349.00	SINGLE PUR NAV	3840
33	GRAYS HBR BAY CA	NPS	10655.00	10655.00	0.00	0.00	10655.00	SINGLE PUR NAV	6770
33	HUMBOLDT HBR BAY CA	SPN	4670.00	4670.00	0.00	0.00	4670.00	SINGLE PUR NAV	7860
33	MORRO BAY HBR CA	SPL	2580.00	2580.00	0.00	0.00	2580.00	SINGLE PUR NAV	11860
33	MOSS LANDING HBR CA	SPN	845.00	845.00	0.00	0.00	845.00	SINGLE PUR NAV	11880
33	OCEANSIDE HBR CA	SPL	1045.00	1045.00	0.00	0.00	1045.00	SINGLE PUR NAV	13080
33	CHIS HBR CA	SPL	890.00	890.00	0.00	0.00	890.00	SINGLE PUR NAV	14360
33	PORT ORFORD OR	NPP	425.00	425.00	0.00	0.00	425.00	SINGLE PUR NAV	14370
33	SANTA BARBARA HBR CA	SPL	1038.00	1038.00	0.00	0.00	1038.00	SINGLE PUR NAV	15730
33	SAN DIEGO HBR CA	SPL	1095.00	1085.00	0.00	0.00	1085.00	SINGLE PUR NAV	16110
33	SUISLAU RIVER OR	NPP	864.00	864.00	0.00	0.00	864.00	SINGLE PUR NAV	16860
33	TILLAMOOK BAY BAR OR	NPP	43.00	43.00	0.00	0.00	43.00	SINGLE PUR NAV	18230
33	UMPIQUA RIVER OR	NPP	1094.00	1094.00	0.00	0.00	1094.00	SINGLE PUR NAV	18750
33	WILLAPA HBR	NPS	431.00	431.00	0.00	0.00	431.00	SINGLE PUR NAV	19990
33	YAQUINA BAY HBR OR	NPP	1565.00	1565.00	0.00	0.00	1565.00	SINGLE PUR NAV	20290
33	VENTURA HBR CA	SPL	2288.00	2288.00	0.00	0.00	2288.00	SINGLE PUR NAV	24190
33	PT HUENEME CA	SPL	135.00	135.00	0.00	0.00	135.00	SINGLE PUR NAV	74656
33	LA-LB HARBOR MODEL, CA	SPL	160.00	160.00	0.00	0.00	160.00	SINGLE PUR NAV	76101
33			34162.00	34162.00	0.00	0.00	34162.00		
34	OAKLAND HBR CA	SPN	2205.00	2205.00	0.00	0.00	2205.00	SINGLE PUR NAV	12990
34	REDWOOD CITY HBR CA	SPN	2600.00	2600.00	0.00	0.00	2600.00	SINGLE PUR NAV	15100
34	RICHMOND HBR CA	SPN	6481.00	6481.00	0.00	0.00	6481.00	SINGLE PUR NAV	15280
34	SACRAMENTO RVR CA	SPK	457.00	457.00	0.00	0.00	457.00	SINGLE PUR NAV	15870
34	SAN FRANCISCO HBR CA	SPN	1825.00	1825.00	0.00	0.00	1825.00	SINGLE PUR NAV	16130
34	SAN FRANCISCO HBR DRFT REM	SPN	2195.00	2195.00	0.00	0.00	2195.00	SINGLE PUR NAV	16140
34	SAN JOAQUIN RVR CA	SPK	1659.00	1659.00	0.00	0.00	1659.00	SINGLE PUR NAV	16180
34	S PAULO BAY MRE IS STR CA	SPN	1080.00	1080.00	0.00	0.00	1080.00	SINGLE PUR NAV	16230

**TABLE 1D**  
**DEEP DRAFT NAVIGATION PROJECTS**  
**NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT USE	RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
34	S FRANCISCO BAY DLT MDL CA	SPN	2000.00	990.00	1010.00	0.00	990.00	SINGLE PUR NAV	76029
34	SF BAY LONG TERM MGT STRAT	SPN	150.00	150.00	0.00	0.00	150.00	SINGLE PUR NAV	88920
34			21317.00	20307.00	1010.00	0.00	20307.00		
36	ANCHORAGE HBR AK	NPA	1380.00	1380.00	0.00	0.00	1380.00	SINGLE PUR NAV	360
36	HOMER HBR AK	NPA	265.00	265.00	0.00	0.00	265.00	SINGLE PUR NAV	80508
36			1645.00	1645.00	0.00	0.00	1645.00		
37	THOMAS BASIN (KETCHIKAN)	NPA	564.00	564.00	0.00	0.00	564.00	SINGLE PUR NAV	631
37			564.00	564.00	0.00	0.00	564.00		
38	BARBERS POINT HBR, HI	POD	143.00	143.00	0.00	143.00	0.00	SINGLE PUR NAV	910
38			143.00	143.00	0.00	143.00	0.00		
39	SAN JUAN HBR PR	SAJ	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV	16190
39			10.00	10.00	0.00	0.00	10.00		
	<b>TOTAL</b>		<b>486038.00</b>	<b>463363.00</b>	<b>19375.00</b>	<b>3300.00</b>	<b>463363.00</b>		



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX G - Shallow Draft Navigation Projects Not Subject  
to the Inland Waterway Fuel Tax, Navigation  
Cost Recovery Analysis by Segment,  
O&M Expenditures for FY 1996  
(Estimated - President's Budget).**

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	SPEC ALLOC	OTHER USE	JOINT RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
1	MINNESOTA RIVER MN	NCS	145.00	145.00	0.00	0.00	145.00	SINGLE PUR NAV 111310
1	RHODE ISLAND SM BOAT HARBOR	NCR	123.00	123.00	0.00	0.00	123.00	SINGLE PUR NAV 88825
1			268.00	268.00	0.00	0.00	268.00	
2	SOUTHEAST MO PORT, NS R, MO	LMS	150.00	150.00	0.00	0.00	150.00	SINGLE PUR NAV 87404
2			150.00	150.00	0.00	0.00	150.00	
3	MOUTH OF YAZOO RIVER, MS	LMK	113.00	113.00	0.00	0.00	113.00	SINGLE PUR NAV 493
3	HELENA HBR AR	LMM	500.00	500.00	0.00	0.00	500.00	SINGLE PUR NAV 7440
3	LAKE PROVIDENCE HBR LA	LMK	292.00	292.00	0.00	0.00	292.00	SINGLE PUR NAV 9360
3	OSCEOLA HBR OR	LMM	453.00	453.00	0.00	0.00	453.00	SINGLE PUR NAV 13430
3	WOLF RVR HBR TN	LMM	650.00	650.00	0.00	0.00	650.00	SINGLE PUR NAV 20150
3	YAZOO RIVER MO	LMK	3.00	3.00	0.00	0.00	3.00	SINGLE PUR NAV 20350
3	STAHR HBR, HICKMAN PORT	LMM	400.00	400.00	0.00	0.00	400.00	SINGLE PUR NAV 22020
3	NEW MADRID HBR MO	LMM	300.00	300.00	0.00	0.00	300.00	SINGLE PUR NAV 33012
3	ROSEDALE HBR MS	LMK	410.00	410.00	0.00	0.00	410.00	SINGLE PUR NAV 87012
3	CARTHERSVILLE HBR MO	LMM	300.00	300.00	0.00	0.00	300.00	SINGLE PUR NAV 87092
3	MADISON PARISH PORT	LMK	37.00	37.00	0.00	0.00	37.00	SINGLE PUR NAV 87168
3	CLIBORNE CO PORT MS	LMK	153.00	153.00	0.00	0.00	153.00	SINGLE PUR NAV 87249
3	YELLOW BEND PORT, AR	LMK	142.00	142.00	0.00	0.00	142.00	SINGLE PUR NAV 87282
3	MR&T-MCKELLER LI HBR	LMV	1415.00	1415.00	0.00	0.00	1415.00	SINGLE PUR NAV 99981
3	MR&T-GREENVILLE HBR	LMV	258.00	258.00	0.00	0.00	258.00	SINGLE PUR NAV 99982
3	MR&T-VICKSBURG HBR	LMV	223.00	223.00	0.00	0.00	223.00	SINGLE PUR NAV 99983
3	MR&T BATON ROUGE HBR	LMV	150.00	150.00	0.00	0.00	150.00	SINGLE PUR NAV 99984
3			5799.00	5799.00	0.00	0.00	5799.00	
4	MISS R QUILTS VENICE LA	LMN	1645.00	1645.00	0.00	0.00	1645.00	SINGLE PUR NAV 63
4	BARATARIA BAY WH LA	LMN	921.00	921.00	0.00	0.00	921.00	SINGLE PUR NAV 900
4	BAYOU TECH LA	LMN	727.00	727.00	0.00	0.00	727.00	SINGLE PUR NAV 1150
4	BENBROOK LAKE TX	SWF	1610.00	318.00	1292.00	0.00	318.00	MULTIW ALLOC 1350
4	BYU LAFOURGHE&LAFOURGH JUM	LMN	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL ALLOC	NAVIGATION ALLOC	OTHER ALLOC	SPEC USE	JOINT RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
4	FRESHWATER BAYOU LA	LMN	1659.00	1659.00	0.00	0.00	1659.00	SINGLE PUR NAV	6200
4	GRAPEVINE LAKE TX	SWF	1956.00	41.00	1915.00	0.00	41.00	MULTI W ALLOC	6760
4	TRINITY RIVER, TX	SWG	1270.00	1270.00	0.00	0.00	1270.00	SINGLE PUR NAV	18510
4			9798.00	6591.00	0.00	0.00	6591.00		
5	APALACHICOLA BAY IL	SAM	187.00	187.00	0.00	0.00	187.00	SINGLE PUR NAV	430
5	JOHNS PASS, PINELLAS, FL	SAJ	400.00	400.00	0.00	0.00	400.00	SINGLE PUR NAV	1001
5	BAYOU LABAIRE AL	SAM	455.00	455.00	0.00	0.00	455.00	SINGLE PUR NAV	1120
5	BILOXI HBR MS	SAM	461.00	461.00	0.00	0.00	461.00	SINGLE PUR NAV	1520
5	IWM/CLOCHEE R TO ANLTER F	SAJ	221.00	221.00	0.00	0.00	221.00	SINGLE PUR NAV	2480
5	DAUPHIN ISLE BAY AL	SAM	252.00	252.00	0.00	0.00	252.00	SINGLE PUR NAV	4480
5	EAST PASS CHANNEL FL	SAM	886.00	886.00	0.00	0.00	886.00	SINGLE PUR NAV	4980
5	FLY CREEK AL	SAM	249.00	249.00	0.00	0.00	249.00	SINGLE PUR NAV	5970
5	OKEECHOGEE WWY, FL	SAJ	3933.00	3326.00	607.00	0.00	3326.00	SINGLE PUR NAV	13240
5	PERDIDO PASS CH AL	SAM	350.00	350.00	0.00	0.00	350.00	SINGLE PUR NAV	13880
5	TANGIPOHODA RV LA	LMN	100.00	100.00	0.00	0.00	100.00	SINGLE PUR NAV	17970
5	DOG AND FOWL RIVERS, AL	SAM	505.00	505.00	0.00	0.00	505.00	SINGLE PUR NAV	20710
5	WITHLA COOCHIE RIVER	SAJ	34.00	34.00	0.00	0.00	34.00	SINGLE PUR NAV	74393
5	NEW PASS SARASOTA FL	SAJ	1086.00	1086.00	0.00	0.00	1086.00	SINGLE PUR NAV	74483
5	BAYOU CODEN AL	SAM	231.00	231.00	0.00	0.00	231.00	SINGLE PUR NAV	74520
5	BON SECOUR RVR AL	SAM	551.00	551.00	0.00	0.00	551.00	SINGLE PUR NAV	76060
5			9901.00	9901.00	0.00	0.00	9901.00		
13	LICKING RIVER OPEN CHANNEL	ORL	30.00	30.00	0.00	0.00	30.00	SINGLE PUR NAV	10229
13	PORTSMOUTH HARBOR	ORH	75.00	75.00	0.00	0.00	75.00	SINGLE PUR NAV	10221
13	BIG SANDY HARBOR	ORH	1035.00	1035.00	0.00	0.00	1035.00	SINGLE PUR NAV	10222
13	ELK RIVER HARBOR	ORH	3.00	3.00	0.00	0.00	3.00	SINGLE PUR NAV	88833
13			1143.00	1143.00	0.00	0.00	1143.00		
21	ANDALUSIA HBR, IL	NCR	71.00	71.00	0.00	0.00	71.00	SINGLE PUR NAV	74228
21			71.00	71.00	0.00	0.00	71.00		

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	NAVIGATION ALLOC	OTHER ALLOC	JOINT RECOVERY USE	PROJECT TYPE	CWIS NO
24	IRONDEQUOIT BAY, NY	NCB	160.00	160.00	0.00	0.00	160.00	SINGLE PUR NAV 8220
24	OAK ORCHARD HBR NY	NCB	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV 12980
24	OLCOTT HBR NY	NCB	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV 44066
24	WILSON HBR NY	NCB	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV 73938
24			190.00	190.00	0.00	0.00	190.00	
25	VERMILLION HBR OH	NCE	10.00	10.00	0.00	0.00	10.00	SINGLE PUR NAV 44003
25	ROCKY R HBR OH	NCB	12.00	12.00	0.00	0.00	12.00	SINGLE PUR NAV 44072
25	BOLLES HARBOR MI	NCE	29.00	29.00	0.00	0.00	29.00	SINGLE PUR NAV 87750
25			51.00	51.00	0.00	0.00	51.00	
26	PT LOOKOUT HBR MI	NCE	301.00	301.00	0.00	0.00	301.00	SINGLE PUR NAV 14220
26	PORT SANILAC HBR MIT SHR D	NCE	75.00	75.00	0.00	0.00	75.00	SINGLE PUR NAV 14410
26	PORT SANILAC HBR MI	NCE	185.00	185.00	0.00	0.00	185.00	SINGLE PUR NAV 46039
26	INLAND ROUTE MICHIGAN	NCE	31.00	31.00	0.00	0.00	31.00	SINGLE PUR NAV 48140
26	LEXINGTON HBR MIT SHR DAM	NCE	77.00	77.00	0.00	0.00	77.00	SINGLE PUR NAV 73909
26	LEXINGTON HARBOR MI	NCE	147.00	147.00	0.00	0.00	147.00	SINGLE PUR NAV 74006
26	PT AUSTIN HBR MI	NCE	188.00	188.00	0.00	0.00	188.00	SINGLE PUR NAV 74213
26			1004.00	1004.00	0.00	0.00	1004.00	
27	FOX RIVER WI	NCE	2215.00	2215.00	0.00	0.00	2215.00	SINGLE PUR NAV 6610
27	GRAND TRAVERSE HBR MI	NCE	123.00	123.00	0.00	0.00	123.00	SINGLE PUR NAV 6730
27	LAKE MICHIGAN DIVERSION, IL	NCC	645.00	645.00	0.00	0.00	645.00	SINGLE PUR NAV 8218
27	SAUGATUCK HBR MI	NCE	918.00	918.00	0.00	0.00	918.00	SINGLE PUR NAV 16390
27	PORTAGE LAKE HBR MI	NCE	103.00	103.00	0.00	0.00	103.00	SINGLE PUR NAV 21530
27	LELAND HBR MI	NCE	280.00	280.00	0.00	0.00	280.00	SINGLE PUR NAV 46018
27	ARCADIA HBR MI	NCE	77.00	77.00	0.00	0.00	77.00	SINGLE PUR NAV 46063
27	GREILICKVILLE HARBOR, MI	NCE	63.00	63.00	0.00	0.00	63.00	SINGLE PUR NAV 46103
27	ALGOMA HARBOR WI	NCE	117.00	117.00	0.00	0.00	117.00	SINGLE PUR NAV 74177
27	BURNS WATER WAY SBH	NNCC	95.00	95.00	0.00	0.00	95.00	SINGLE PUR NAV 87387

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV DIST	TOTAL ALLOC	NAVIGATION ALLOC	OTHER ALLOC	JOINT RECOVERY ALLOC	PROJECT USE	CWIS NO
27			4636.00	4636.00	0.00	0.00	4636.00	
28	CORNUCUPIA HBR WI	NCE	107.00	107.00	0.00	0.00	107.00	3970
28	EAGLE HBR MI	NCE	60.00	60.00	0.00	0.00	60.00	22870
28			167.00	167.00	0.00	0.00	167.00	
29	TOWN Ck SC	SAC	491.00	491.00	0.00	0.00	491.00	1
29	CRIEHAVEN HBR ME	NED	293.00	293.00	0.00	0.00	293.00	339
29	WELLFLEET HBR MA	NED	1214.00	1214.00	0.00	0.00	1214.00	452
29	CRANES CREEK VA	NAO	321.00	321.00	0.00	0.00	321.00	585
29	QUEENS CREEK VA	NAO	337.00	337.00	0.00	0.00	337.00	795
29	BARNEGAT INLET NY	NAP	1455.00	1455.00	0.00	0.00	1455.00	950
29	E ROCKAWAY INLET NY	NAN	930.00	930.00	0.00	0.00	930.00	5220
29	CHINCOTEAGUE HBR REFG VA	NAO	36.00	36.00	0.00	0.00	36.00	5841
29	FIRE INLT TO JONES NY	NAN	1668.00	1668.00	0.00	0.00	1668.00	5880
29	GREEN HBR	NED	364.00	364.00	0.00	0.00	364.00	6920
29	NJ IWW	NAP	3729.00	3729.00	0.00	0.00	3729.00	8190
29	SESUIT HBR	NED	217.00	217.00	0.00	0.00	217.00	8193
29	LAKE MONTAUK HBR NY	NAN	1930.00	1930.00	0.00	0.00	1930.00	9340
29	CHINCOTEAGUE BAY VA	NAO	42.00	42.00	0.00	0.00	42.00	10890
29	MURDERKILL RVR	NAP	40.00	40.00	0.00	0.00	40.00	12020
29	NFWLS LKE CHAMPLAIN NY VT	NAN	645.00	645.00	0.00	0.00	645.00	12200
29	WW COAST OF VA	NAO	1268.00	1268.00	0.00	0.00	1268.00	19550
29	HOSKINS CREEK, VA	NAB	395.00	395.00	0.00	0.00	395.00	20920
29	SALEM RIVER NJ	NAP	410.00	410.00	0.00	0.00	410.00	24950
29	TANGIER CHANNEL VA	NAO	467.00	467.00	0.00	0.00	467.00	27650
29	NEWBURYPORT HBR MA	NED	646.00	646.00	0.00	0.00	646.00	39018
29	JONES INTL NY	NAN	3880.00	3880.00	0.00	0.00	3880.00	41006
29	SHARK RVR NJ	NAN	1190.00	1190.00	0.00	0.00	1190.00	41007
29	BROWN CK NY	NAN	500.00	500.00	0.00	0.00	500.00	41022
29	MATTITUCK HBR NY	NAN	570.00	570.00	0.00	0.00	570.00	41082

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY**  
**FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT**  
**OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

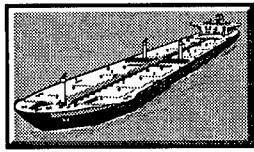
SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT RECOVERY USE	PROJECT TYPE	CWIS NO
29	STARLING'S CREEK VA	NAO	389.00	389.00	0.00	0.00	389.00 SINGLE PUR NAV	42001
29	CRISFIELD HBR MD	NAB	65.00	65.00	0.00	0.00	65.00 SINGLE PUR NAV	51950
29	HERRING Ck TALL TIMBERS MD	NAB	40.00	40.00	0.00	0.00	40.00 SINGLE PUR NAV	62011
29	NANTICOKE RIVER DE MD	NAB	260.00	260.00	0.00	0.00	260.00 SINGLE PUR NAV	73549
29	BROAD Ck MD	NAB	360.00	360.00	0.00	0.00	360.00 SINGLE PUR NAV	13554
29	CHESTER RVR MD	NAB	660.00	660.00	0.00	0.00	660.00 SINGLE PUR NAV	73557
29	OCEAN CITY HDR SNPXNT BY FISHING BAY MD	NAB	125.00	125.00	0.00	0.00	125.00 SINGLE PUR NAV	73567
29	KNAPPS NARROWS	NAB	70.00	70.00	0.00	0.00	70.00 SINGLE PUR NAV	73583
29	TWITCH CV THOROFARE R MD	NAB	782.00	782.00	0.00	0.00	782.00 SINGLE PUR NAV	73589
29	WICOMICO RVR MD	NAB	150.00	150.00	0.00	0.00	150.00 SINGLE PUR NAV	73602
29	CHEESEQUAKE CREEK, NJ	NAN	615.00	615.00	0.00	0.00	615.00 SINGLE PUR NAV	73606
29	SHINNECOCK INLET NY	NAN	2590.00	2590.00	0.00	0.00	2590.00 SINGLE PUR NAV	73626
29	GLEN COVE CRK NY	NAN	200.00	200.00	0.00	0.00	200.00 SINGLE PUR NAV	73644
29	TOMS RIVER, NJ	NAP	130.00	130.00	0.00	0.00	130.00 SINGLE PUR NAV	73686
29	DEEP CR NEWPORT NEWS VA	NAO	290.00	290.00	0.00	0.00	290.00 SINGLE PUR NAV	73894
29	STONY Ck BRANFORD CONN	NED	597.00	597.00	0.00	0.00	597.00 SINGLE PUR NAV	75117
29	CHINCOTEAGUE INLET VA	NAO	412.00	412.00	0.00	0.00	412.00 SINGLE PUR NAV	76064
29	TYLERS BEACH VA	NAO	888.00	888.00	0.00	0.00	888.00 SINGLE PUR NAV	76106
29	RUDEE INLET, VIRGINIA	NAO	34.00	34.00	0.00	0.00	34.00 SINGLE PUR NAV	76107
29		NAO	570.00	570.00	0.00	0.00	570.00 SINGLE PUR NAV	87455
29			32265.00	32265.00	0.00	0.00	32265.00	
30	BELHAVEN HBR NC	SAS	415.00	415.00	0.00	0.00	415.00 SINGLE PUR NAV	1290
30	THURMOND DAM & RES	SAS	9480.00	59.00	9421.00	0.00	59.00 MULTI W ALLOC	3350
30	HARTWELL GA, SC	SAS	10365.00	26.00	10339.00	0.00	26.00 MULTI W ALLOC	7380
30	LOCKWD FOLLY R NC	SAW	857.00	857.00	0.00	0.00	857.00 SINGLE PUR NAV	10020
30	MANTEO BAY NC	SAW	6506.00	6506.00	0.00	0.00	6506.00 SINGLE PUR NAV	10580
30	MURRELL'S INLET SC	SAC	65.00	65.00	0.00	0.00	65.00 SINGLE PUR NAV	12030
30	OKLAWAHA RIVER FL	SAJ	127.00	127.00	0.00	0.00	127.00 SINGLE PUR NAV	13250
30	PONCE DE LEON INLET FL	SAJ	2147.00	2147.00	0.00	0.00	2147.00 SINGLE PUR NAV	14310
30	SAV R BELOW AUGUSTA GA SC	SAS	2475.00	2475.00	0.00	0.00	2475.00 SINGLE PUR NAV	16450

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	NAVIGATION ALLOC	OTHER SPEC ALLOC	JOINT RECOVERY USE	PROJECT TYPE	CWIS NO
30 SILVER LK HBR NC	SAW	200.00	200.00	0.00	0.00	200.00	SINGLE PUR NAV	16800
30 ST. LUCIE INLET FL	SAJ	85.00	85.00	0.00	0.00	85.00	SINGLE PUR NAV	117370
30 ROANOKE RVR NC	SAW	125.00	125.00	0.00	0.00	125.00	SINGLE PUR NAV	22510
30 PAMLICO & TARR NC	SAW	125.00	125.00	0.00	0.00	125.00	SINGLE PUR NAV	74615
30 ST AUGUSTINE HBR FL	SAJ	4.00	4.00	0.00	0.00	4.00	SINGLE PUR NAV	75027
30 FOLLY RVR SC	SAC	386.00	386.00	0.00	0.00	386.00	SINGLE PUR NAV	87088
30		33362.00	13602.00	19760.00	0.00	13602.00		
32 COLUMBIA R BAKER BAY	NPP	26.00	26.00	0.00	0.00	26.00	SINGLE PUR NAV	3570
32 COLUM. R. BTM CHNK SD IS	NPP	7.00	7.00	0.00	0.00	7.00	SINGLE PUR NAV	23080
32		33.00	33.00	0.00	0.00	33.00		
33 CHETCO RIVER	NPP	500.00	500.00	0.00	0.00	500.00	SINGLE PUR NAV	3130
33 COQUILLE R OR	NPP	454.00	454.00	0.00	0.00	454.00	SINGLE PUR NAV	3900
33 DEPOE BAY OR	NPP	3.00	3.00	0.00	0.00	3.00	SINGLE PUR NAV	4610
33 QUILLAYUTE RIVER	NPS	2250.00	2250.00	0.00	0.00	2250.00	SINGLE PUR NAV	14760
33 ROGUE RVR HBR GOLD BH	NPP	816.00	816.00	0.00	0.00	816.00	SINGLE PUR NAV	15600
33		4023.00	4023.00	0.00	0.00	4023.00		
34 SACRAMENTO RVR CA	SPK	117.00	117.00	0.00	0.00	117.00	SINGLE PUR NAV	8187
34 PETALUMA RVR CA	SPN	1690.00	1690.00	0.00	0.00	1690.00	SINGLE PUR NAV	13940
34 SACRAMENTO RVR DEBRIS CTRL	SPK	872.00	427.00	445.00	0.00	427.00	SINGLE PUR NAV	15810
34 YUBA RIVER DEBRIS TREAT CA	SPK	30.00	30.00	0.00	0.00	30.00	SINGLE PUR NAV	20410
34		2709.00	2264.00	445.00	0.00	2264.00		
35 DILLINGHAM HBR AK	NPA	599.00	599.00	0.00	0.00	599.00	SINGLE PUR NAV	4800
35 NOME HBR AK	NPA	305.00	305.00	0.00	0.00	305.00	SINGLE PUR NAV	72742
35		904.00	904.00	0.00	0.00	904.00		
36 NINILCHIK HBR AK	NPA	182.00	182.00	0.00	0.00	182.00	SINGLE PUR NAV	12640
36		182.00	182.00	0.00	0.00	182.00		

**TABLE 21S**  
**SHALLOW DRAFT NAVIGATION PROJECTS NOT SUBJECT TO THE INLAND WATERWAY  
 FUEL TAX- NAVIGATION COST RECOVERY ANALYSIS BY SEGMENT  
 OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)  
 FY 1996 (EST. PRES)**

SEC NO	PROJECT NAME	DIV DIST	NAVIGATION ALLOC/SPEC	OTHER USE	JOINT RECOVERY AMOUNT	PROJECT TYPE	CWIS NO
TOTAL			106656.00	82637.00	24019.00	0.00	82637.00



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX H - Shallow Draft Navigation Projects  
Subject to the Inland Waterway Fuel Tax,  
Analysis by Segment, O&M Expenditures for  
FY 1996 (Estimated - President's Budget).**

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	NAVIGATION ALLOC	OTHER ALLOC	SPEC USE	JOINT NAVIGATION AMOUNT	PROJECT TYPE	CWIS NO
1	MISS. R. RHB MO R AND MPLS	NCS	4954.00	4954.00	0.00	0.00	4954.00	SINGLE PUR NAV	1053
1	CLARENCE CANNON DAM & RES	LNS	5279.00	2.00	5277.00	0.00	2.00	MULTI W ALLOC	2560
1	MISS R BTW MO R MWPLS MN	LNS	12437.00	11948.00	489.00	0.00	11948.00	SINGLE PUR NAV	11370
1	MISS R BTW MO R MWPLS MN	LNS	18858.00	18623.00	235.00	0.00	18623.00	SINGLE PUR NAV	11380
1	MISS R BTW MO R MPLS MN	NCR	38749.00	36504.00	2245.00	0.00	36504.00	SINGLE PUR NAV	11550
1	RES AT HEADWATERS	NCS	3515.00	0.00	1538.00	1977.00	197.70	MULTI W ALLOC	15200
1	MISS. R. BET MO. AND MNPLS	NCS	29644.00	28853.00	791.00	0.00	28853.00	SINGLE PUR NAV	74295
			113336.00	100884.00	10375.00	1977.00	101081.70		
2	CARLYLE LAKE, IL	LMS	3715.00	0.00	2165.00	1550.00	155.00	MULTI WO ALLOC	2700
2	KASKASKIA RVR IL	LMS	1710.00	1710.00	0.00	0.00	1710.00	SINGLE PUR NAV	8770
2	LAKE SHELBYVILLE, IL	LMS	6399.00	0.00	4630.00	1769.00	176.90	MULTI WO ALLOC	16691
			11824.00	1710.00	6735.00	3319.00	201.90		
3	MR&T CHAN IMP MAINT DREDG	LMV	20000.00	20000.00	0.00	0.00	20000.00	M R & T	99991
3	MR&T CHAN IMP CONST DREDG	LMV	0.00	0.00	0.00	0.00	0.00	M R & T	99992
3	MR&T CHAN IMP MAINT DIKES	LMV	4620.00	4620.00	0.00	0.00	4620.00	M R & T	99993
3	MR&T CHAN IMP CONST DIKES	LMV	21666.00	21666.00	0.00	0.00	21666.00	M R & T	99994
3	MR&T CHAN IMP REVET MAINT	LMV	22915.00	0.00	0.00	7367.29	7630.70	M R & T	99995
3	MR&T CHAN IMP REVET CONST	LMV	22124.00	0.00	0.00	22124.00	7367.29	M R & T	99996
3	MR&T OLD RIVER MAINT	LMV	4821.00	0.00	0.00	4821.00	1605.39	M R & T	99997
3	MR&T OLD RIVER CONST	LMV	0.00	0.00	0.00	0.00	0.00	M R & T	99998
3	MR&T ALL OTHER FEATURES	LMV	221058.00	0.00	221058.00	0.00	0.00	M R & T	99999
			317204.00	46286.00	221058.00	49960.00	622889.38		
4	GIWW LA	LMN	16110.00	16110.00	0.00	0.00	16110.00	SINGLE PUR NAV	62
4	GIWW TX	SWG	17805.00	17805.00	0.00	0.00	17805.00	SINGLE PUR NAV	7140
4	MOUTH OF THE COLORADO RVR	SWG	1780.00	1780.00	0.00	0.00	1780.00	SINGLE PUR NAV	74826
4	CHANNEL TO PORT MANSFIELD	SWG	1510.00	1510.00	0.00	0.00	1510.00	SINGLE PUR NAV	74847
4	CHANNEL TO VICTORIA, TX	SWG	1595.00	1595.00	0.00	0.00	1595.00	SINGLE PUR NAV	88834
			38800.00	38800.00	0.00	0.00	38800.00		

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	NAVIGATION ALLOC/SPEC	OTHER USE	JOINT NAVIGATION USE	PROJECT TYPE	CWIS NO
5	GIWW-MOBILE DIST AL, MS, FL	SAM	3172.00	3172.00	0.00	0.00	3172.00	SINGLE PUR NAV
5			3172.00	3172.00	0.00	0.00	3172.00	
6	APLCH-CHAT-FLINT,FL,AL,GA	SAM	4321.00	4151.00	170.00	0.00	4151.00	SINGLE PUR NAV
6	BUFORD DAM GA	SAM	7377.00	73.00	7304.00	0.00	73.00	MULTI W ALLOC
6	JIM WOODRUFF L D FL GA	SAM	5111.00	1301.00	3810.00	0.00	1301.00	MULTI W ALLOC
6	W.F. GEORGE L D AL GA	SAM	6434.00	788.00	5646.00	0.00	788.00	MULTI W ALLOC
6	WEST PT DAN AL GA	SAM	5114.00	15.00	5099.00	0.00	15.00	MULTI W ALLOC
6			28357.00	6328.00	22029.00	0.00	6328.00	
7	BWT RVR AL	SAM	16820.00	15144.00	1676.00	0.00	15144.00	SINGLE PUR NAV
7			16820.00	15144.00	1676.00	0.00	15144.00	
8	ROBERT F. HENRY L&D AL	SAM	3688.00	721.00	2967.00	0.00	721.00	MULTI W ALLOC
8	MILLERS FERRY L&D AL	SAM	5156.00	720.00	4436.00	0.00	720.00	MULTI W ALLOC
8	ALA-COOSA RIVERS, AL	SAM	5668.00	5172.00	496.00	0.00	5172.00	SINGLE PUR NAV
8			14512.00	6613.00	7899.00	0.00	6613.00	
9	TENN-TOM WWY AL, MS	SAM	21090.00	16742.00	4348.00	0.00	16742.00	SINGLE PUR NAV
9			21090.00	16742.00	4348.00	0.00	16742.00	
10	TENNESSEE RIVER	ORN	13637.00	13637.00	0.00	0.00	13637.00	SINGLE PUR NAV
10			13637.00	13637.00	0.00	0.00	13637.00	
11	GREEN BARREN RVR KY	ORL	1374.00	1374.00	0.00	0.00	1374.00	SINGLE PUR NAV
11			1374.00	1374.00	0.00	0.00	1374.00	
12	KENTUCKY RVR KY	ORL	1059.00	1059.00	0.00	0.00	1059.00	SINGLE PUR NAV
12			1059.00	1059.00	0.00	0.00	1059.00	
13	OH RVR LOCKS - DAMS	ORH	17286.00	16962.00	324.00	0.00	16962.00	SINGLE PUR NAV
13	OHIO RV OP CH WORK PA	ORP	270.00	270.00	0.00	0.00	270.00	SINGLE PUR NAV
13			270.00	270.00	0.00	0.00	270.00	

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

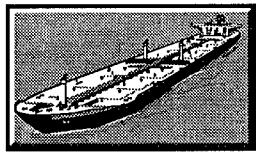
SEG NO	PROJECT NAME	DIV/ DIST	TOTAL ALLOC	NAVIGATION ALLOC	OTHER ALLOC/SPEC	JOINT NAVIGATION USE	PROJECT TYPE	CWIS NO
13 OH RVR OP CH WORK		ORH	2050.00	2050.00	0.00	0.00	2050.00	SINGLE PUR NAV 13170
13 OH RVR LD CONSTR PA		ORP	13020.00	13020.00	0.00	0.00	13020.00	SINGLE PUR NAV 13180
13 OH RVR OP CH WRK IL		ORL	3705.00	3705.00	0.00	0.00	3705.00	SINGLE PUR NAV 13190
13 OH RVR LCK DAMS IL		ORL	23262.00	23042.00	220.00	0.00	23042.00	SINGLE PUR NAV 13200
13			59593.00	58049.00	544.00	0.00	58049.00	
14 KANAWHA RVR LCKS & DAMS WV		ORH	11376.00	11376.00	0.00	0.00	11376.00	SINGLE PUR NAV 8720
14 SUMMERSVILLE LAKE, WV		ORH	1310.00	0.00	610.00	700.00	70.00	MULTI WO ALLOC 17740
14			12686.00	11376.00	610.00	700.00	11446.00	
15 ALLEGHENY RVR PA		ORP	12736.00	12718.00	18.00	0.00	12718.00	SINGLE PUR NAV 230
15			12736.00	12718.00	18.00	0.00	12718.00	
16 MONONGAHELA RVR PA		ORP	16568.00	16568.00	0.00	0.00	16568.00	SINGLE PUR NAV 1740
16 TYGART LAKE, WV		ORP	1615.00	0.00	199.00	1416.00	141.60	MULTI WO ALLOC 18730
16			18183.00	16558.00	199.00	1416.00	16709.60	
17 M-K ARK R NAV SYS OK		SWT	4769.00	4631.00	138.00	0.00	4631.00	SINGLE PUR NAV 510
17 M-K ARK R NAV SYS AR		SWL	20479.00	17357.00	3122.00	0.00	17357.00	SINGLE PUR NAV 520
17 DARDANELLE AR		SWL	6385.00	2467.00	3918.00	0.00	2467.00	MULTI W ALLOC 4460
17 EUFAULA LAKE OK		SWT	4406.00	446.00	3960.00	0.00	446.00	MULTI W ALLOC 5650
17 KEYSTONE LAKE OK		SWT	3819.00	596.00	3223.00	0.00	596.00	MULTI W ALLOC 8990
17 OOLOGAH LAKE, OK		SWT	1373.00	122.00	1251.00	0.00	122.00	MULTI W ALLOC 13340
17 KERR LD RES OK		SWT	4862.00	2162.00	2700.00	0.00	2162.00	MULTI W ALLOC 15370
17 WEBBERS FLS LAD OK		SWT	3515.00	1376.00	2139.00	0.00	1376.00	MULTI W ALLOC 19590
17 WHITE RVR AR		LMM	2200.00	2200.00	0.00	0.00	2200.00	SINGLE PUR NAV 19830
17 OZARK L&D AR		SWL	4175.00	975.00	3200.00	0.00	975.00	MULTI W ALLOC 22480
17			55983.00	32332.00	23651.00	0.00	32332.00	
18 PEARL RVR MS-LA		LMK	280.00	280.00	0.00	0.00	280.00	SINGLE PUR NAV 13780
18			280.00	280.00	0.00	0.00	280.00	

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEG NO	PROJECT NAME	DIV DIST	NAVIGATION ALLOC/SPEC	OTHER ALLOC/SPEC	JOINT NAVIGATION USE	PROJECT TYPE	CWIS NO
19 OUACHITA/BLACK R AR LA		LMK	5304.00	4272.00	1032.00	0.00	4272.00 SINGLE PUR NAV 13460
19 DEGRAY LAKE		LMK	4189.00	62.00	4127.00	0.00	62.00 MULTI W ALOC 36011
19			9493.00	4334.00	5159.00	0.00	4334.00
20 RED R WW MISS R TO SHREVE		LMK	9714.00	9494.00	220.00	0.00	9494.00 SINGLE PUR NAV 65
20			97.40	9494.00	220.00	0.00	9494.00
21 ILLINOIS WWY, IL		NCR	20844.00	20561.00	283.00	0.00	20561.00 SINGLE PUR NAV 8010
21 ILLINOIS WWY, IL		LMS	1440.00	1440.00	0.00	0.00	1440.00 SINGLE PUR NAV 8040
21			22234.00	22001.00	283.00	0.00	22001.00
22 BARKLEY D LAKE BARKLEY, KY		ORN	7026.00	2887.00	4139.00	0.00	2887.00 MULTI W ALLOC 940
22 CHEATHAM LD		ORN	5895.00	3364.00	2531.00	0.00	3364.00 MULTI W ALLOC 3040
22 CORDELL HULL D RES		ORN	4192.00	328.00	3864.00	0.00	328.00 MULTI W ALLOC 3940
22 OLD HICKORY LD		ORN	7282.00	2259.00	5023.00	0.00	2259.00 MULTI W ALLOC 13280
22			24385.00	8838.00	15557.00	0.00	8838.00
23 MO RVR SIOUX CITY TO MTH		MRO	6068.00	3329.00	239.00	2500.00	3579.00 MULTI WO ALLOC 621
23 FT PECK DAM MT		MRO	4050.00	399.00	3651.00	0.00	399.00 MULTI W ALLOC 6230
23 FT RNDL D LK FRNC'S CSE SD		MRO	8520.00	619.00	7901.00	0.00	619.00 MULTI W ALLOC 6270
23 GARRISON D LK SAKWA ND		MRO	9154.00	514.00	8640.00	0.00	514.00 MULTI W ALLOC 6400
23 GAVINS PT D LW CLK LKE SD		MRO	6363.00	509.00	5854.00	0.00	509.00 MULTI W ALLOC 6440
23 OAHE D LKE SD ND		MRO	9363.00	493.00	8870.00	0.00	493.00 MULTI W ALLOC 12960
23 RATHBURN LKE IOWA		MRK	2028.00	0.00	1037.00	991.00	99.10 MULTI WO ALLOC 14880
23 TUTTLE LKE CK KANSAS		MRK	2202.00	0.00	464.00	1738.00	173.80 MULTI WO ALLOC 18660
23 WILSON LKE KANSAS		MRK	1307.00	0.00	765.00	542.00	54.20 MULTI WO ALLOC 20060
23			49053.00	5863.00	37241.00	5771.00	6440.10
29 ATLANTIC IWW VA		NAO	1732.00	1732.00	0.00	0.00	1732.00 SINGLE PUR NAV 720
29 BLACKWATER RIVER, VA		NAO	495.00	495.00	0.00	0.00	495.00 SINGLE PUR NAV 27028
29 SCITUATE HARBOR, MA		NED	208.00	208.00	0.00	0.00	208.00 SINGLE PUR NAV 39065
29 AIWW DISMAL SWAP CANAL		NAO	1437.00	1437.00	0.00	0.00	1437.00 SINGLE PUR NAV 88800

**TABLE 11S**  
**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX**  
**BY SEGMENT- OPERATIONS AND MAINTENANCE EXPENDITURES (\$1,000)**  
**FY 1996 (EST. PRES)**

SEG No	PROJECT NAME	DIV/ DIST	NAVIGATION ALLOC/SPC	OTHER ALLOC/SPEC	JOINT NAVIGATION USE	PROJECT TYPE	CWIS NO
24		3872.00	3872.00	0.00	0.00	3872.00	
30	AIWW SC	SAC	2420.00	2420.00	0.00	0.00	2420.00
30	AIWW-WILM NC	SAV	5097.00	5097.00	0.00	0.00	5097.00
30	IWW JAX TO MIAMI FL	SAJ	3293.00	3293.00	0.00	0.00	3293.00
30	AIWW FERND TO ST JOHN RF	SAJ	75.00	75.00	0.00	0.00	75.00
30	AIWW GA	SAS	1916.00	1916.00	0.00	0.00	1916.00
30	CAROLINA BEACH INLET, NC	SAV	852.00	852.00	0.00	0.00	852.00
30	MASONBORO INLET	SAV	4650.00	4650.00	0.00	0.00	4650.00
30	NEW TOPSAIL INLET, NC	SAV	840.00	840.00	0.00	0.00	840.00
30	BOGUE INLET, NC	SAV	655.00	655.00	0.00	0.00	655.00
30	NEW RIVER INLET, NC	SAV	1595.00	1595.00	0.00	0.00	1595.00
30			21393.00	21393.00	0.00	0.00	21393.00
32	ALBENI FALLS D IDAHO	NPS	4467.00	14.00	4453.00	0.00	14.00
32	ICE HBR L D WA	NPW	14885.00	8555.00	6360.00	0.00	8525.00
32	COUGAR LKE OR	NPP	1282.00	4.00	1278.00	0.00	4.00
32	DALLES L D OR WA	NPP	12270.00	1726.00	10544.00	0.00	1726.00
32	DETROIT B CLIFF OR	NPP	2247.00	3.00	2244.00	0.00	3.00
32	DWORSHAK D RESID	NOW	9144.00	117.00	9027.00	0.00	117.00
32	GREEN PETER FOSTER OR	NPP	2558.00	3.00	2555.00	0.00	3.00
32	HILLS C K LKE OR	NPP	752.00	3.00	749.00	0.00	3.00
32	JOHN DAY L D OR WA	NPP	12223.00	1312.00	10911.00	0.00	1312.00
32	LITTLE GOOSE L D WA	NPW	4978.00	337.00	4641.00	0.00	337.00
32	LKOUT PT OR	NPP	5439.00	13.00	5426.00	0.00	13.00
32	LWR GRANITE L D WA	NPW	10619.00	357.00	10262.00	0.00	357.00
32	LWR MONUMENTAL L D WA	NPR	5318.00	354.00	4964.00	0.00	354.00
32	MCNARY L D OR WA	NPW	12561.00	1698.00	10873.00	0.00	1688.00
32	WILMTE FALLS LK OR	NPP	846.00	846.00	0.00	0.00	846.00
32			99589.00	15302.00	84287.00	0.00	15302.00
	TOTAL		980541.00	475189.00	442329.00	63043.00	453090.68



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX I - Deep Draft Navigation Projects  
Actual and Average O&M Expenditures,  
Waterborne Commerce and Average Annual  
Tonnages, and Annual O&M Costs per Ton of  
Commerce**

## DEEP-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1992-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)

ITEM	ITEM	PROJECT NAME	ST.	TYPE	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000		
80	279	NPD	NAP	Absecon Inlet	NJ	D	20,938.0	4,550.0	9,953.0	7,157.0	3,029.9	53,500	0.000	1,400	0.200	0.000	
74196	3617	NCD	NCE	Alpena Harbor	MI	D	2485,664.0	2,647,252.0	2,672,477.0	2,568,484.3	0,01750	44,960	0.000	28,793	11,700	20,510	
360	4820	NPD	NPA	Anchorage Harbor	AK	D	2,538,889.0	2,470,067.0	2,559,391.7	2,523,115.7	0,63134	1,52,955	1,636,750	1,065,930	1,127,640	752,400	
73550	727	NAD	NAB	Almapolis Harbor	MD	D	0.0	4.0	0.0	1.3	1,554,550	0.086	20,000	0.000	0.000	0.000	0.000
28500	2133	SAD	SAU	Arecibo Harbor	PR	D	17,717.0	15,212.0	20,760.0	17,895.3	231,623	0.000	0.000	9,700	0.000	0.000	
630	3863	NCD	NCE	Ashland Harbor	WI	D	83,821.0	101,564.0	120,241.0	101,875.3	189,293	2,13,750	27,000	33,793	400,400	338,090	
74464	860	SAD	SAC	Ashley River	SC	D	22,925.0	419,778.0	317,949.0	30,922,040.0	0,00201	0.644	0.000	0.000	0.000	0.000	
650	3219	NCD	NCB	Ashtabula Harbor	OH	D	10,519,208.0	8,970,038.0	10,368,158.0	9,955,581.7	0,06875	78,510	25,300	589,350	987,700	876,590	
680	2071	LMD	LMN	Atchafalaya River, Morgan City-Gulf	LA	D	1,795,705.0	1,601,127.0	1,969,232.0	1,732,021.3	3,02453	5,420,029	2,388,300	11,368,600	5,550,940	7,328,600	
870	700	NAD	NAB	Baltimore Harbor and Channels	MD	D	31,755,691.0	31,710,223.0	41,450,422.0	38,758,778.7	7,910,505	3,982,620	14,25,400	16,687,940	6,850,100	14,551,350	
910	4457	POD	POD	Barber's Point Harbor	HI	D	6,823,174.0	9,955,262.0	9,022,040.0	9,056,580.0	0,00053	4,777	0.000	0.000	0.000	0.000	
1040	362	NAD	NAN	Bay Ridge Red Rock Channel	NY	D	2,975,927.0	2,855,326.0	3,069,443.0	2,966,566.0	0,61797	1,88,647	138,200	2,029,000	2,086,100	179,000	
1120	2199	SAD	SAM	Bayou La Batre	AL	D	2,428.0	1,188.0	77,794.0	27,157.0	8,18286	22,058	40,830	2,900	10,020	11,100	
1210	763	SAD	SAW	Beaufort Harbor	NC	D	45,340.0	53,804.0	47,894.0	49,012.7	18,51,241	97,342	178,370	77,000	16,300	5,900	
21750	115	NED	NED	Belfast Harbor	ME	D	2,605.0	5,804.0	1,487.0	3,298.7	0,00030	0.000	0.000	0.000	0.000	0.000	
74197	4792	NCD	NCE	Belle River	MI	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	
1310	4792	NPD	NPS	Bellingham Harbor	WA	D	1,382,207.0	1,223,117.0	1,343,181.0	1,316,501.7	0,95948	130,954	303,400	457,770	189,000	31,250	
396	145	NED	NED	Beverly Harbor	MA	D	13.0	13.0	10.0	12.0	0.08333	0.000	0.000	0.000	0.000	0.000	
1110	2235	NCD	NCE	Black River (Port Huron)	MI	D	150,014.0	153,932.0	144,644.0	152,530.0	0,33691	51,338	80,480	626,900	11,600	1,800	
1660	110	NCD	NCB	Block Rock Channel & Tonawanda Lbr	NY	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	
1075	70	NED	NED	Block Rock Harbor	CT	D	237,198.0	251,421.0	228,892.0	239,492.3	0,41024	98,225	40,400	45,800	0.000	0.000	
73445	199	NED	NED	Block Island Harbor of Refuge	RI	D	67,58.0	56,26.0	27,63.0	4,391.7	8,602,024	37,693	48,730	45,800	0.000	193,700	
80546	80546	NPD	NPP	Bonneville Lock and Dam	OR	D	0.0	0.0	0.0	0.0	0,711,787,12222	3,711,787	3,443,600	3,181,100	3,539,440	2,847,000	
1960	150	NED	NED	Boston Harbor	MA	D	17,462,283.0	18,008,392.0	17,040,239.0	17,033,932.0	0,00753	131,722	0.000	0.000	42,420	31,000	
1990	2424	SWD	SWG	Brazos Island	TX	D	1,828,623.0	1,964,556.0	3,601,697.0	2,665,592.0	1,02405	2,24,880	1,961,670	1,078,000	2,571,240	70,000	
73360	311	NED	NED	Bridgeport Harbor	CT	D	2,710,136.0	2,986,899.0	2,824,734.0	2,742,000.0	0,00333	9,141	0.000	0.000	0.000	0.000	
2080	780	SAD	SAS	Brunswick Harbor	GA	D	1,446,851.0	1,593,328.0	1,626,173.0	1,556,450.7	2,951,112	4,593,269	2,968,120	3,564,800	2,234,590	4,013,400	
331	110	NED	NED	Bucksport Harbor	ME	D	1,354,323.0	1,157,849.0	1,231,946.0	1,248,039.3	0,00000	0.000	0.000	0.000	0.000	0.000	
2140	3226	NCD	NCB	Buffalo Harbor	NY	D	1,803,346.0	1,530,970.0	1,388,970.0	1,580,504.3	2,43446	3,874,674	2,57,900	2,157,800	5,564,820	1,933,800	
2250	3739	NCD	NCC	Burns Waterway Harbor	IN	D	8,756,091.0	9,315,387.0	9,343,881.0	9,138,453.0	0,04584	48,889	62,050	16,900	272,580	846,400	
41015	359	NAD	NAN	Buttermilk Channel	NY	D	26,111,768.0	27,022,251.0	26,988,098.0	26,708,082.0	0,00629	167,897	58,010	97,910	87,100	203,860	
2440	2254	LMD	LMN	Catastieu River and Pass	LA	D	44,036,688.0	45,430,980.0	48,331,277.0	45,935,448.3	0,15982	7,341,292	3,302,360	2,297,800	5,890,210	7,402,800	
2410	3741	NCD	NCC	Calumet Harbor and River	IL	D	11,768,474.0	13,705,330.0	18,554,346.0	14,675,317.0	0,0762	1,576,430	926,470	737,900	558,660	881,500	
73556	711	NAD	NAB	Cambridge Harbor	MD	D	25,585.0	3,402.0	3,528.0	10,838.3	7,15869	77,558	3,160	1,800	0.000	16,300	
2520	2160	SAD	SAU	Canaveral Harbor	FL	D	2,968,104.0	3,454,064.0	3,623,080.0	3,348,419.3	1,07592	3,602,625	3,229,000	2,191,730	3,878,660	3,066,500	
73772	732	NAD	NAO	Cape Charles City Harbor	VA	D	94,143.0	165,486.0	109,920.0	123,516.3	0,962,256	18,892	0.000	4,300	21,600	0.000	
2620	171	NED	NED	Cape Cod Canal	MA	D	11,326,249.0	12,034,986.0	10,795,173.0	11,336,802	0,4476	5,098,724	4,711,190	4,806,800	4,478,700	6,846,200	
2640	843	SAD	SAW	Cape Fear River above Wilmington	NC	D	456,229.0	373,323.0	407,389.0	413,153.0	1,91631	791,729	61,190	802,560	1,441,900	1,193,200	
333	131	NED	NED	Cape Porpoise	ME	D	0.0	0.0	0.0	0.0	0,00000	0.000	0.000	0.000	0.000	0.000	
44037	3116	NCD	NCB	Cape Vincent Harbor	NY	D	0.0	0.0	0.0	0.0	0,00000	0.000	0.000	0.000	0.000	0.000	
76018	2182	SAD	SAM	Carriaballie Harbor	FL	D	1,119.0	1,124.0	1,007.0	1,083.3	6,07,032	6,576	24,310	15,800	3,000	0.000	
87038	87038	SPL	SPL	Channel Islands Harbor	CA	D	0.0	0.0	0.0	0.0	1,738,03,68444	74,110	2,835,100	780,460	220,3200	976,700	

**DEEP-DRAFT NAVIGATION PROJECTS:**  
**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),**  
**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)**

Proj.	Year	Div.	Loc.	Project Name	St.	Type	\$1,000	Tonnes	Tonnes	Average Costs (\$/Tonnes)								
										Total	\$1,000	\$1,000	\$1,000					
73783	658	NAD	NAO	Channel to Newport News	VA	D	28,635,080.0	21,938,246.0	20,250,401.0	23,941,242.3	0.01548	310,589	70,250	65,800	1,421,360	285,700	49,220	
2830	296	SWD	SWG	Channel to Port Bolivar	TX	D	0.0	0.0	0.0	0.0	0.0	26,583,600.0	26,590	0.020	51,700	0.000	0,800	0,050
2940	3401	NCD	NEC	Channels In Lake Saint Clair	MI	D	58,130,654.0	56,932,243.0	63,953,464.0	59,592,293	0.00618	38,900	73,270	50,100	25,1460	239,300	157,840	
2880	773	SAD	SAC	Charleston Harbor	SC	D	9,650,460.0	9,502,726.0	10,825,846.0	9,984,344.0	0.071342	7,150,118	5,218,460	8,213,400	6,476,250	7,805,500	7,670,080	
2890	3706	NCD	NCE	Charlevoix Harbor	MI	D	1,353,394.0	1,467,018.0	1,545,372.0	1,456,947	0.33033	481,157	10,510	231,000	394,740	512,300	106,940	
3000	2116	SAD	SAJ	Charlotte Harbor	FL	D	943,302.0	1,230,065.0	1,045,280.0	1,072,831.0	0.91741	944,222	291,370	261,100	272,550	2,826,800	91,250	
76132	152	NED	NED	Chelesa River	MA	D	6,820,714.0	6,276,183.0	6,015,251.0	8,369,786.0	0.06981	82,113	0.000	0.000	0.000	0.100	0,000	
74203	3621	NCD	NCE	Cheyboygan Harbor	MI	D	108,595.0	221,437.0	299,983.3	0.12419	26,067	0.000	0.000	0.000	0.000	0,000		
45009	3747	NCD	NC C	Chicago Harbor	IL	D	88,157.0	75,598.0	1,400.0	59,022.0	18,951,26	1,177,563	1,57,450	1,66,400	1,573,400	2,597,500	2,075,120	
3810	3746	NCD	NC C	Chicago River	IL	D	1,336,673.0	1,764,459.0	1,944,053.0	1,681,721.7	0.41128	691,654	1,042,750	929,300	457,510	442,900	288,850	
74399	2157	SAD	SAJ	Christiansen Harbor-St Croix	VI	D	1,045,849.0	1,201,765.0	1,543,463.0	1,283,589.0	0.00153	1,927	0.000	0.000	0.000	0.000	0,000	
3430	3217	NCD	NCB	Cleveland Harbor	OH	D	13,553,652.0	14,083,014.0	15,284,407.0	14,346,557.7	0.53092	9,071,663	4,433,580	3,961,800	5,732,810	3,359,300	3,429,020	
22140	274	NAD	NAP	Cold Spring Inlet	NJ	D	78,054.0	28,012.0	35,032.0	46,366.0	5,98937	264,099	1,024,240	474,200	561,460	247,800	142,030	
3630	8604	NPD	NPP	Column and Lower Willamette Rivers	OR	D	50,890,016.0	50,566,312.0	50,702,930.0	50,719,773.7	0.31245	15,847,264	8,844,100	10,988,800	10,988,790	11,741,300	10,350,490	
3600	8902	NPD	NPP	Columbia River at Mouth	OR	D	53,372,198.0	52,746,256.0	52,305,588.0	52,842,947.7	0.13975	7,394,712	6,113,850	6,571,100	7,761,180	5,343,400	6,397,450	
3620	8681	NPD	NPP	Columbia River b/w Vancouver & the D OR	D	D	10,970,921.0	10,843,234.0	11,276,975.0	10,930,376.7	0.03898	404,242	268,750	335,300	206,330	94,400	88,950	
73779	365	NAD	NAN	Coney Island Channel	NY	D	688,898.0	265,604.0	493,095.0	482,532.0	0.01491	7,183	47,340	0.000	82,000	0.000	0,000	
3770	5220	NCD	NCB	Commeau Harbor	OH	D	6,540,240.0	3,534,446.0	5,855,746.0	5,243,144.0	0.09757	51,1573	71,940	323,600	386,730	1,077,500	912,650	
3760	56	NED	NED	Connecticut River Below Hartford	CT	D	986,460.0	631,632.0	593,960.0	793,350.7	0.08047	60,976	0.000	356,200	161,110	17,700	465,300	
3840	4660	NPD	NPP	Cook Bay	OR	D	4,458,253.0	5,415,877.0	3,743,685.0	4,558,364.3	1,03416	4,638,387	2,924,530	4,771,100	3,630,060	3,660,700	3,215,050	
14340	2423	SWD	SWG	Corpus Christi Ship Channel	TX	D	60,332,295.0	59,335,712.0	78,124,330.0	66,157,812.3	0.07538	4,989,988	1,759,260	1,645,000	5,481,020	2,786,600	6,247,880	
4270	4380	SPD	SPN	Crescent City Harbor	CA	D	13,606.0	88,716.0	0.0	35,440.7	4,103840	1,454,498	207,210	719,200	984,330	428,200	140,700	
408	42	NED	NED	Cross Rip Shabs Nantucket Sound	MA	D	56,936.0	91,725.0	62,021.0	70,127.3	0.00001	0.000	0.000	0.000	0.000	0.000	0,000	
87034	8704	SPD	SP L	Dana Point Harbor	CA	D	0.0	0.0	0.0	0.0	40,38,630	40,38,630	40,387	154,750	7,400	0.000	0,000	
341	9	NED	NED	Deep Island Thoroughfare	ME	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0,000	
10964	238	NAD	NAP	Delaware Bay Harbor of Refuge	DE	D	0.0	0.0	0.0	424.0	141.3	10,46110	17,025	21,680	0.000	0.000	0.000	0,000
4550	5232	NAD	NAP	Daaware R. between Philadelphia & Tre PA	D	D	5,667,680.0	5,973,423.0	5,973,020.0	5,754,708.7	0.53013	1,93,087	40,480	472,000	61,159	1,563,700	371,630	
43005	551	NAD	NAP	Delaware River at Camden	NJ	D	4,955,504.0	4,958,626.0	5,668,642.0	5,028,324.0	0.02269	114,884	0.000	0.000	0.000	0.000	2,030,700	
4570	5250	NAD	NAP	Delaware River, Philadelphia to the Sea	DE	D	113,165,375.0	120,560,566.0	120,416,277.0	118,001,386.3	0.04406	17,038,895	82,620	14,368,000	15,403,910	17,467,390	12,531,970	
4710	3301	NCD	NCE	Detroit River	MI	D	63,135,594.0	62,662,030	72,027,292.0	65,90,986.3	0.14481	9,548,217	4,704,970	4,191,500	5,940,020	4,808,800	3,421,100	
4900	160	NED	NED	Dorchester Bay & Neponset River	MA	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0,000	
72431	305	NED	NED	Duck Island Harbor	CT	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0,000	
5050	3924	NCD	NC E	Duluth-Superior Harbor	MN	D	39,303,705.0	37,675,398.0	41,819,417.0	39,600,841.3	0.09041	3,580,171	3,965,830	3,07,500	2,623,600	2,433,800	0,000	
5060	3222	NCD	NCB	Dunkirk Harbor	NY	D	0.0	20,140	36,112,030	127,147.3	0.73834	93,878	249,590	283,000	125,920	491,800	194,700	
27030	620	NAD	NAO	Dymers Creek	VA	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0,000	
41062	351	NAD	NAN	East River	NY	D	26,777,750.0	29,093,790.0	29,691,800.0	29,182,146.7	0.01052	305,841	50,020	81,6100	60,180	0.000	158,870	
411	184	NED	NED	Edgartown Harbor	MA	D	0.0	0.0	0.0	1,222,1222	1,222	0.000	0.000	0.000	0.000	0,000		
73205	4708	NPD	NFS	Ediz Hook/Port Angeles Harbor	WA	D	2,335,665.0	1,987,346.0	1,685,048.0	2,006,019.7	0.04766	95,612	2,870	331,900	5,200	2,800	1,160	
5600	3221	NCD	NCB	Erie Harbor	PA	D	1,247,046.0	1,160,144.0	978,776.0	1,128,656.3	0.69154	780,507	288,270	77,800	459,800	76,220	491,800	
5700	4725	NPD	NPS	Everett Harbor and Snohomish River	WA	D	6,010,220.0	4,714,275.0	4,191,556.0	4,972,118.0	0.13958	680,011	485,810	815,900	926,400	714,000	1,002,860	
5760	3218	NCD	FAD	Fairport Harbor	OH	D	2,612,642.0	2,402,986.0	2,954,667.0	2,656,755.0	0.25759	684,361	137,960	899,700	805,980	75,300	803,250	
9410	189	NED	NED	Fall River Harbor	MA	D	3,539,233.0	3,457,520.0	4,178,036.0	3,772,053.0	0.01042	52,177	0.000	0.000	0.000	0.000	0,000	

**DEEP-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)**

ENR YR/CT	PRJ #	PRJ NAME	ST	TRE \$1,000	TONS 1992-94	TONS 1992-94	TRE \$1,000	TRE \$1,000 PER TON	AVERAGE O&M COSTS (\$/TON)		WATERBORNE COMMERCE (\$/TON)	WATERBORNE COMMERCE (\$/TON)	
									1990-94	1992-94			
5840	784	SAD	SAJ	Fernandina Harbor	FL	D	379,296.0	519,780.0	587,002.0	405,606.0	3,085,19	1,925,54	
41016	354	NAD	NA	Flushing Bay Creek	NY	D	1,957,934.0	1,824,630.0	1,832,094.0	1,871,552.7	2,011,19	1,305,26	1,711,10
6260	2161	SAD	SAJ	Fort Pierce Harbor	FL	D	127,028.0	200,495.0	189,151.0	172,225.0	2,00651	361,761	1,036,97
6130	3718	NC	NC	Frankfort Harbor	MI	D	77,284.0	83,031.0	80,985.0	80,454.7	6,33243	549,781	1,087,40
6170	2408	SWD	SWG	Ferryport Harbor	TX	D	14,932,599.0	14,028,604.0	17,450,108.0	15,475,770.7	1,018531	2,867,748	1,077,80
24570	NPD	NPS	NF	Friday Harbor	WA	D	0.0	0.0	0.0	0.0	4,163	4,163	2,347,94
6340	2417	SWD	SWG	Galveston Harbor	TX	D	123,175,980	9,755,324.0	10,256,321.0	10,177,614.7	3,089,99	4,192,00	3,130,58
344	121	NED	NED	Georges River	ME	D	0.0	0.0	0.0	0.0	0,0000	0,000	0,0000
6480	772	SAD	SAC	Georgetown Harbor	SC	D	965,206.0	1,112,801.0	706,228.0	924,745.0	3,26022	3,014,87	3,087,35
416	143	NED	NED	Glooucester Harbor & Annisquam River	MA	D	103,575.0	77,586.0	56,512.0	79,217.7	1,42204	112,730	2,959,12
41023	360	NAD	NA	Gowanus Creek Channel	NY	D	2,174,526.0	232,852.0	2,189,526.0	2,189,526.0	0,00032	7,700	58,710
6670	3728	NC	NC	Grand Haven Harbor	MI	D	870,705.0	1,041,162.0	878,112.0	917,759.7	1,432556	1,314,76	547,85
98871	3881	NC	NC	Grand Marais Harbor	MN	D	0.0	0.0	0.0	0.0	59,768,98556	59,770	0,0000
46564	3842	NC	NC	Grand Marais Harbor	MI	D	0.0	0.0	0.0	0.0	190,513,2111	190,513	187,9440
6770	4702	NPD	NPS	Grays Harbor	WA	D	6,932,634.0	4,382,558.0	1,654,408.0	4,329,866.7	3,045,37	5,364,68	3,239,90
74160	3802	NC	NC	Grays Reef Passage	MI	D	8,826,174.0	8,826,125.0	9,160,453.0	9,160,453.0	0,00000	0,000	0,0000
559	300	NED	NED	Great Salt Pond/Bloc Island	RI	D	0.0	0.0	6,212.0	2,070.7	0,01803	0,066	0,0000
6860	3108	NC	NCB	Great South Bay Harbor	NY	D	0.0	0.0	0.0	0.0	13,163,94667	13,164	0,0000
6910	3778	NC	NC	Green Bay Harbor	WI	D	2,430,677.0	2,586,853.0	2,288,056.0	2,435,195.3	0,97697	2,379,10	7,052,70
7150	2083	SAD	SAM	Gulfport Harbor	MS	D	1,298,561.0	1,420,446.0	1,842,480	1,503,718.7	1,33507	2,007,57	2,021,50
80506	4864	NPD	NPA	Haines Harbor	AK	D	405,225.0	455,680.0	289,527.0	386,477.3	0,00090	3,480	0,0000
7300	3602	NC	NC	Harbor Beach Harbor	MI	D	0.0	95,926.0	86,111.0	58,112.0	12,67532	2,301,321	2,383,30
73894	358	NAD	NA	Harlem River	NY	D	140,183.0	20,172.0	53,845.7	0,01270	0,584	12,190	0,5000
7550	4400	POD	POD	Hilo Harbor	HI	D	1,537,795.0	1,688,638.0	1,455,485.0	1,503,972.7	0,11383	171,193	407,97
7610	3730	NC	NC	Holland Harbor	MI	D	315,555.0	316,563.0	391,214.0	341,110.7	4,00079	1,501,158	971,380
80508	4844	NPD	NPA	Homer Harbor	AK	D	266,946.0	472,315.0	376,760.0	318,673.7	0,72118	273,191	338,38
7660	4420	POD	POD	Honolulu Harbor	HI	D	115,21,923.0	10,594,724.0	11,672,245.0	11,672,245.0	0,01289	145,191	470,86
76801	4813	NPD	NPA	Hoonah Harbor	AK	D	575,193.0	252,634.0	377,012.0	401,613.0	0,00000	0,000	394,910
7760	2665	LND	LWN	Houma Navigation Canal	LA	D	1,174,648.0	732,804.0	830,552.0	1,747,771	1,451,56	297,500	3,155,700
241	63	NED	NED	Housatonic River	CT	D	179,049.0	70,450.0	52,005.0	10,504.7	0,21421	21,529	0,0000
7780	2012	SWD	SWG	Houston Ship Channel	TX	D	137,683,612.0	141,476,979.0	143,662,625.0	140,834,065.3	0,04184	5,897,721	9,047,82
7800	5396	NAD	NA	Hudson River Channel	NY	D	16,15,793.0	17,306,325.0	16,246,227.0	16,756,150	0,03635	608,163	2,795,53
7810	NAD	NA	NA	Hudson River, New York City to Waterford	NY	D	0.0	0.0	0.0	0.0	2,941,38301	2,841,38	2,392,67
7860	4375	SFD	SPN	Humboldt Bay Harbor	CA	D	1,31,104.0	934,357.0	1,07,374.0	1,23,75,903	2,56540	3,174,912	3,287,44
78498	4942	NPD	NPA	Humboldt Harbor	AK	D	17,265.0	8,131.0	3,965.0	9,787.3	1,81306	17,745	6,497,00
7920	3214	NC	NCB	Huron Harbor	OH	D	67,807.0	529,403.0	870,856.0	672,588.7	0,89743	603,593	802,90
72786	NPD	NPA	NPA	Iliulluk Harbor	AK	D	0.0	0.0	0.0	0.0	1,065,05000	1,035	0,0000
18120	3738	NC	NC	Indiana Harbor	IN	D	15,35,831.0	15,54,403.0	16,44,862.0	15,572,298.7	0,03037	475,948	299,860
8160	248	NAD	NAP	IWW from Delaware R. to Chesapeake Bi	DE	D	13,52,305.0	14,52,953.0	13,63,32,560	13,98,514.7	13,562,407	52,530	20,573,10
8410	2017	SAD	SAJ	Jacksonville Harbor	FL	D	17,208,707.0	18,905,304.0	18,910,150.0	18,341,387.0	0,19217	4,173,560	2,987,780
54000	367	NAD	NA	Jamaica Bay	NY	D	1,024,972.0	600,614.0	802,091.0	808,687.0	0,81786	655,985	4,403,340
8430	5500	NAD	NAQ	James River	VA	D	7,37,325.0	6,851,084.0	5,387,497.0	6,838,278.7	0,28946	1,169,634	1,249,130

DEEP-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)

PROJ.	YR/LOC.	STAT.	PROJECT NAME	ST.	TYPE	\$1,000 \$1,000	\$1,000 \$1,000	TONS	\$1,000 \$1,000	AVERAGE TONE		AVERAGE TONE		O&M COSTS (\$1,000 \$1, \$1,000 \$1,000)	
										TONE	TONS	TONE	TONS		
8660	4410	POD	Kahului Harbor	HI	D	2,557,717.0	2,215,754.0	2,398,065.0	2,319,633.3	0.15931	349,159	537,210	0.000	0.000	
73019	4415	POD	Kaumakakai Harbor	HI	D	242,224.0	201,923.0	189,454.0	211,157.0	0.00258	545	0.545	0.000	0.000	
990	4405	POD	Kawaihae Harbor	HI	D	78,548.0	65,526.0	75,577.0	72,817.0	0.00718	5,217	0.000	0.000	0.000	
87153	NPD	NPS	Kemmore Navigation Channel	WA	D	0.0	0.0	0.0	0.0	0.0	35,969,31889	35,969	0.000	0.000	
8890	16	NED	Kennebec River	ME	D	5,184.0	2,560.0	5,307.0	4,383.7	0.00001	150,1601	942,310	115,600	451,640	
8910	3753	NCD	Kenosha Harbor	WI	D	3.0	1.0	18.0	7.3	45,082,59242	393,066	693,770	934,300	31,480	
72798	NPD	NPA	Ketchikan Harbor	AK	D	0.0	0.0	0.0	0.0	0.000	16,497,63778	16,498	0.000	0.000	
76650	3762	NCD	Keweenaw Harbor	WI	D	80,000.0	0.0	0.0	26,700.0	20,526.0	541,953	251,080	198,800	659,000	
8960	3850	NCD	Keweenaw Waterway	MI	D	9,142.0	33,578.0	12,474.0	45,831.7	2,225,455	2,285,290	866,400	556,970	922,000	
8970	2111	SAD	Key West Harbor	FL	D	10,411.0	64,820.0	29,784.0	35,005.0	0.24719	8,653	0.000	0.000	0.000	
72714	4944	NFD	King Cove Harbor	AK	D	7,945.0	11,031.0	6,676.0	8,450.7	4,17384	35,270	0.000	0.000	0.000	
72753	4834	NFD	Kodiak Harbor	AK	D	49,383.0	525,277.0	58,916.0	58,192.0	0.00271	1,432	0.000	0.000	0.000	
72920	8419	NFD	Lake Crockett (Keystone) Harbor	WA	D	0.0	0.0	0.0	0.0	0.000	27,021,88889	5,800	14,400	24,250	
9400	4724	NFD	Lake Washington Ship Canal	WA	D	1,613,807.0	1,918,898.0	1,364,789.0	1,342,451.7	2,91757	4,762,729	4,398,160	7,046,980	5,857,600	
74158	3797	NCD	Little Bay De Noc/Gladstone Harbor & KMI	MI	D	176,908.0	180,395.0	265,194.0	207,479.0	0.00000	0.000	0.000	0.000	0.000	
73780	655	NAD	Little River (Greek)	VA	D	132,443.0	57,981.0	37,899.0	76,107.7	0.00001	0.000	0.000	0.000	0.000	
9970	3110	NCD	Little Sodus Bay Harbor	NY	D	0.0	0.0	0.0	0.0	0.000	73,65,80444	19,730	20,340	11,860	
10960	3216	NCD	Lorain Harbor	OH	D	13,282,176.0	13,676,686.0	14,748,165.0	13,929,342.3	0.12856	1,797,289	624,130	1,453,300	1,487,180	
74719	4110	SPD	SPL	Los Angeles and Long Beach Harbors	CA	D	92,152,317.0	97,943,739.0	98,661,789.0	95,885,951.7	0.01254	2,116,670	243,490	1,662,200	4,823,300
10270	3722	NCD	Ludington Harbor	MI	D	846,150.0	966,416.0	1,093,469.0	988,678.3	0.67573	654,565	569,840	832,600	172,580	
73404	148	NED	Lynn Harbor	MA	D	85.0	0.0	0.0	28.3	0.03529	0.000	0.000	0.000	0.000	
10166	2023	SAD	Manatee Harbor	FL	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	
10480	3720	NCD	Manistee Harbor	MI	D	45,556.0	424,713.0	483,031.0	454,466.7	0.97104	441,303	1,430	222,700	699,320	
10490	3799	NCD	Manistique Harbor	MI	D	920.0	22,460.0	1,091.0	8,157.0	6,74645	55,031	59,310	65,900	23,070	
10510	3760	NCD	Manitowoc Harbor	WI	D	274,063.0	299,792.0	330,317.0	301,390.7	1,23605	37,534	197,760	640,500	29,450	
73883	261	NAD	Manita Creek	IN	D	116,283.0	104,683.0	85,667.0	102,214.3	0.00001	0.000	0.000	0.000	0.000	
4430	SPD	SPL	Marina Del Rey	CA	D	0.0	0.0	0.0	0.0	285,732,46566	283,732	205,940	818,800	143,390	
48013	3844	NCD	Marquette Harbor	MI	D	454,037.0	799,146.0	822,498.0	688,550.7	0.13393	92,211	194,110	13,800	395,300	
10810	2410	SWD	Matajorda Ship Channel	TX	D	5,389,932.0	5,822,656.0	7,379,628.0	6,220,738.7	0.43924	2,732,418	1,040,130	489,100	2,393,060	
22280	2154	SAD	Mayaguez Harbor	PR	D	366,092.0	478,000.0	433,572.0	425,888.0	0.10130	43,444	0.000	8,700	0.000	
45044	3793	NCD	Menominee Harbor	MI	D	128,777.0	161,620.0	216,810.0	168,402.3	121,094	110,090	237,960	128,920	21,600	
11080	2065	LMD	Mermenau River	LA	D	724,866.0	760,359.0	673,080.0	719,408.3	0.87538	629,682	1,329,170	3,794,600	1,192,300	
76002	4832	NFD	Methakatid Harbor	AK	D	593,568.0	683,190.0	560,034.0	598,927.3	0.01619	9,699	0.000	0.000	0.000	
10140	2164	SAD	Miami Harbor	FL	D	6,451,331.0	6,695,979.0	6,554,078.0	6,713.6	0.00272	17,316	0.000	0.000	0.000	
11060	3735	NCD	Michigan City Harbor	IN	D	0.0	0.0	0.0	0.0	502,043,11333	502,063	847,320	623,200	1,481,170	
11270	3756	NCD	Milwaukee Harbor	WI	D	2,153,481.0	2,495,767.0	2,641,109.0	2,430,118.0	0.08314	2,097,530	889,180	1,251,000	621,210	
11410	2060	LMD	Mississippi River - Gulf Outlet	LA	D	5,935,384.0	7,160,081.0	5,588,195.0	6,227,220.0	1,39763	8,703,324	9,416,800	11,724,480	12,780,500	
68	2252	LMD	Mississippi River, Baton Rouge to Gulf	LA	D	84,699,483.0	85,078,883.0	86,445,856.0	85,341,394.0	4,04896	41,728,294	37,961,240	36,616,940	49,820,000	
11570	2005	SAD	Mobile Harbor	AL	D	40,492,387.0	42,959,704.0	44,998,849.0	43,465,313.3	0.21649	9,340,697	10,813,900	21,686,700	20,253,300	
11760	3202	NCD	Monroe Harbor	MI	D	1,778,312.0	1,077,717.0	2,034,815.0	1,130,281.3	2,14884	3,503,169	1,060,580	67,200	1,171,900	
11810	764	SAD	Morehead City Harbor	NC	D	4,440,022.0	3,988,505.0	4,183,055.0	4,207,194.0	2,956,898	1,137,630	1,040,000	1,971,000	3,362,100	
11960	4138	SPD	Morro Bay Harbor	CA	D	0.0	0.0	0.0	0.0	904,504,98687	904,505	128,720	2,385,900	75,7970	283,100

## DEEP-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)

Proj.	Proj.	Ex.	Loc.	Dist.	Loc. Sect. Name	St.	Type	\$1,000s	\$1,000s	AVERAGE COST PER TON		Avg. O&M Cost per ton (\$1,000s)	Avg. Tonnage (\$1,000s)	Avg. O&M Cost per ton (Total \$1,000s)
										\$1,000s	\$1,000s			
11980	4330	SPD	SPN		Moss Landing Harbor	CA	D	5674.0	0.0	0.0	1,891.3	124,13068	234,772	526,340
66015	4630	NPD	NPP		Mutnomah Channel	OR	D	14063,960	1,570,0861.0	1,359,554.0	1,445,007.0	0.000	0.000	0.000
12060	3725	NCD	INC		Muskegon Harbor	MI	D	1,562,478.0	1,635,720.0	2,004,423.0	1,734,123.7	34,190	592,900	216,440
431	153	NED	NEP		Mystic River	MA	D	5,061,831.0	5,581,739.0	4,557,983.0	5,022,535.7	0.00632	31,980	0.000
73370	53	NED	NEP		Mystic River	CT	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000
21760	183	NED	NEP		Nantucket Harbor of Refuge	MA	D	168,039.0	213,819.0	63,472.0	148,443.3	0.00000	0.000	0.000
74703	4365	SPD	SPN		Napa River	CA	D	85,605.0	75,987.0	80,003.0	81,451.7	2,81,253	228,029	31,1820
73336	4430	POD	POD		Naval Hill Harbor	HI	D	1,145,475.0	1,283,438.0	1,150,924.0	1,132,612.3	0.54393	646,697	889,280
432	187	NED	NEP		New Bedford & Fairhaven Harbors	MA	D	483,739.0	502,756.0	601,302.0	529,265.7	0.00000	0.000	0.000
12380	1507	NED	NEP		New Haven Harbor	CT	D	8,425,527.0	8,733,760.0	9,470,882.0	8,810,056.3	0.00000	675,389	1,450
249	304	NED	NEP		New London Harbor	CT	D	1,763,120.0	1,783,282.0	1,674,600.0	1,744,349.3	0.06566	1,05,810	0.000
12520	388	NAD	NAN		Newark Bay, Hackensack & Passaic River	NJ	D	80,177,081.0	83,989,987.0	91,582,915.0	85,210,994.3	0.02347	1,995,184	2,027,020
12490	398	NAD	NAN		New York Harbor	NY	D	115,316,756.0	116,735,756.0	126,100,614.0	119,322,756.7	0.00000	9,985,273	6,595,700
12550	392	NAD	NAN		Newport Harbor	RI	D	22,803,556.0	25,583,760.0	24,144,098.0	23,171,105.3	0.04617	1,063,719	41,050
74720	4132	SPD	SPL		Newton Creek	NY	D	18,044.0	0.0	0.0	6,014.7	6,13681	35,911	90,900
12590	355	NAD	NAN		Norfolk Harbor Channels	VA	D	1,283,351.0	1,552,515.0	1,482,689.0	1,489,600.3	0.01066	15,349	0.000
12801	5735	NAD	NAO		Ogdensburg Harbor	CA	D	54,617,219.0	46,801,768.0	46,815,306.0	49,411,451.3	0.12109	5,983,477	2,07,620
12990	4345	SPD	SPL		Oakland Harbor	CA	D	13,211,391.0	12,735,691.0	12,914,086.0	12,953,056.0	0.12086	1,565,804	2,365,730
13080	SPD	SPL			Oceanside Harbor	CA	D	0.0	0.0	0.0	0.0	0.00000	1,692,717,1211	1,692,717
23370	3790	INCD	NCE		Onconto Harbor	WI	D	65,000.0	0.0	0.0	6,014.7	6,13681	35,911	90,900
87108	POD	POD			Otsego Harbor	AS	D	0.0	0.0	0.0	0.0	0.00000	182,200	32,100
13130	3008	INCD	NCB		Ogdensburg Harbor	NY	D	117,783.0	155,346.0	43,223.0	106,786.0	0.51389	17,560	42,200
13320	4718	NPD	NPS		Olympia Harbor	WA	D	714,406.0	923,637.0	1,154,000.0	1,050,601.0	0.03197	34,900	51,200
13330	3860	INCD	NCE		Onionagon Harbor	MI	D	243,856.0	355,874.0	393,000.0	322,243.3	0.00000	50,884	22,200
66005	4434	NPD	NPW		Oregon Slough	OR	D	2,793,654.0	3,083,272.0	3,729,778.0	3,204,235.0	0.00000	0.000	22,200
13440	3112	INCD	NCB		Oswego Harbor	NY	D	581,500.0	506,070.0	473,978.0	520,528.7	0.44663	327,880	562,200
13590	262	SAD	SAU		Palm Beach Harbor	FL	D	2,645,147.0	2,916,282.0	2,882,844.0	2,718,757.7	0.30294	82,638	97,090
13640	2016	SAD	SAM		Panama City Harbor	FL	D	2,734,011.0	2,582,532.0	2,502,984.0	2,671,505.7	0.15204	396,454	60,230
13680	2004	SAD	SAM		Pascagoula Harbor	MS	D	29,255,298.0	27,020,433.0	30,049,959.0	28,774,196.7	0.10431	3,001,409	4,75,170
13820	12	NED	NEP		Penobscot River	ME	D	1,774,321.0	1,601,728.0	1,652,598.0	1,747,249.3	0.00743	12,454	0.000
13830	2007	SAD	SAM		Pensacola Harbor	FL	D	1,689,753.0	1,650,164.0	1,465,965.0	1,601,960.7	0.24850	39,687	48,500
13850	3723	INCD	NCE		Pentwater Harbor	MI	D	0.0	0.0	0.0	0.0	0.00000	245,299	10,450
72759	4096	NPD	NPA		Petersburg Harbor	AK	D	67,624.0	48,536.0	54,536.0	56,908.7	0.02776	1,580	0.000
14200	170	NED	NPW		Plymouth Harbor	MA	D	37,982.0	1,957.0	2,023.0	14,114.0	1,57641	23,661	8,270
72811	198	NED	NEP		Point Judith Pond & Harbor of Refuge	RI	D	36,810.0	31,349.0	6,961.0	25,065.7	12,44898	311,305	34,880
435	181	NED	NEP		Pollock Rip Shoals	MA	D	0.0	1,444.0	1,451.0	965.0	0.00104	0.000	0.000
75007	2151	SAD	SAU		Ponce Harbor	PR	D	829,102.0	592,159.0	677,328.0	700,723.7	0.03233	22,654	0.000
72761	4426	NPD	NPA		Port Alexander	AK	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000
73338	4425	POD	POD		Port Allen Harbor	HI	D	11,443.0	12,471.0	950.0	8,288.0	1,304,442	42,880	25,700
76831	2163	SAD	SAU		Port Everglades Harbor	FL	D	14,507,888.0	16,197,268.0	18,133,471.3	16,313,471.3	0.00021	68,735	0.000
72893	4714	NPD	NPS		Port Gamble Harbor	WA	D	452,766.0	273,079.0	325,571.7	300,000.0	0.000	0.000	0.000
74856	4150	SPD	SPL		Port Hueneme	CA	D	474,190.0	692,864.0	813,983.0	61,349.0	0.19185	16,877	85,230
													2,470	0.400

**DEEP-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS PER TON (TOTAL 305)**

PRJ #	YR/ D	PROJECT NAME	ST	TYPE	\$ TONS	\$ TONS	AVERAGE O&M COSTS PER TON			TONE LOC.	TONE LOC.	TONE LOC.		
							\$/TON	% CHG	% CHG					
73748	522	NAD	NAN	Port Jefferson Harbor	NY	D	2,354,117.0	2,422,565.0	2,100,837.0	2,205,959.7	0.00000	0.000	0.000	
73933	NCD	Port Ontario Harbor	NY	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	
14370	4688	NPD	Port Orford	OR	D	1,630.0	1,336.0	1,343.0	1,436.3	194,12636	275,830	227,330	251,400	281,760
14380	774	SAD	Port Royal Harbor	SC	D	56,160.0	89,028.0	44,059.0	63,092.3	9,71605	612,811	1,57,1840	278,000	1,632,270
14390	2165	SAD	Port St Joe Harbor	FL	D	42,779.0	74,782.0	124,246.0	80,6102.3	1,54771	124,749	11,010	0.000	5,000
14420	3758	NCD	Port Washington Harbor	WI	D	120,048.0	84,254.0	34,574.0	79,625.3	0.78534	141,067	51,200	3,700	207,210
74190	3921	NCD	Port Wing Harbor	WI	D	0.0	0.0	0.0	0.0	31,708,58222	31,709	40,050	58,200	6,130
21530	3719	NCD	Portage Lake Harbor	MI	D	0.0	0.0	0.0	0.0	83,047,08667	83,067	140,130	0.000	0.000
367	128	NED	Portland Harbor	ME	D	125,1340.0	11,171,097.0	14,245,338.0	124,625,917	0.02129	269,149	0.000	12,000	0.000
512	135	NED	Portland Harbor	NH	D	3,783,039.0	3,681,845.0	3,479,010.0	3,38,298.0	0.03106	112,326	0.000	114,500	2,400
597	718	NAD	Potomac River at Alexandria	VA	D	99,316.0	71,310.0	55,180.0	75,455.3	0.40487	30,541	0.000	171,300	286,100
294	452	NAD	Potomac River Below Washington	MD	D	3,424,759.0	2,724,953.0	3,246,691.0	3,31,134.3	0.04099	123,341	68,560	48,000	54,430
48012	3845	NCD	Presque Isle Harbor	MI	D	10,726,948.0	9,671,979.0	10,191,125.0	10,206,017.3	0.00672	68,593	4,220	77,000	120,850
566	191	NED	Providence River and Harbor	RI	D	6,184,665.0	6,557,780.0	6,566,624.0	6,38,356.3	0.00253	16,277	19,130	6,900	0.000
13970	4701	NFD	Puget Sound and Its Tributary Waters	WA	D	0.0	0.0	0.0	0.0	827,698,68111	82,7700	580,990	0.000	915,400
14860	3827	NAD	Ranitan River	NJ	D	2,549,565.0	2,022,530.0	2,274,280.0	2,75,451.7	0.16122	366,855	1,065,5380	875,100	112,980
15100	4340	SPD	Redwood City Harbor	CA	D	85,856.0	1,839,286.0	85,919.0	1,162,687.0	0.61472	715,342	2,885,140	46,200	809,500
15280	4350	SPD	Richmond Harbor	CA	D	21,042,244.0	24,570,112.0	24,038,983.0	23,285,449.7	0.07102	1,950,280	1,167,040	2,193,500	2,241,780
15390	3106	NCD	Rochester Harbor	NY	D	504,654.0	108,457.0	132,783.0	245,634.7	4,30564	1,070,532	1,018,150	923,700	678,610
373	118	NED	Rockland Harbor	ME	D	15,556.0	465.0	7,016.0	7,678.0	0.00013	0.000	0.000	0.000	0.000
438	142	NED	Rockport Harbor	MA	D	10.0	11.0	8.0	9.7	3,202,88529	30,961	0.060	0.000	0.000
375	117	NED	Rockport Harbor	ME	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000
232	4162	PPD	Rotch Harbor	CT	D	0.0	0.0	0.0	0.0	23,320,08667	23,320	334,930	16,100	0.000
15590	3315	NCD	Rouge River	MI	D	7,191,988.0	7,071,555.0	8,568,506.0	7,310,698.7	0.26843	2,042,320	143,830	888,100	175,860
15780	2069	SWD	Sabine-Neches Waterway	TX	D	38,347,688.0	95,191,063.0	98,674,923.0	94,104,558.0	0.08575	8,094,841	3,701,950	14,305,200	5,895,580
15870	8230	SPD	Sacramento River	CA	D	1,155,727.0	1,078,295.0	1,542,018.0	1,252,008.3	1,25897	1,57,238	323,480	1,267,100	284,490
57420	3663	NCD	Saginaw River	MI	D	3,798,598.0	5,234,008.0	5,19,089.0	4,714,018.3	0.97792	4,608,503	2,128,630	3,161,200	1,390,090
568	188	NED	Sakonnet Harbor	RI	D	0.0	0.0	0.0	0.0	4,232,77778	4,233	0.000	0.000	0.000
439	146	NED	Salem Harbor	MA	D	1,438,636.0	1,558,144.0	1,227,098.0	1,407,958.7	0.00000	0.000	0.000	0.000	0.000
2450	265	NAD	Salem River	NJ	D	72,240.0	41,176.0	107,116.0	73,510.7	2,06991	147,750	0.000	275,000	388,960
16110	4100	SPD	San Diego Harbor	CA	D	637,883.0	1,294,113.0	1,66,900.0	1,332,687	0.26594	274,704	5,700	132,290	0.000
15750	4355	SPD	San Diego-Mission Bay	CA	D	20.0	0.0	0.0	6.7	50,524,53733	336,830	23,040	174,600	16,200
16130	4335	SPD	San Francisco Harbor	CA	D	3,197,829.0	2,340,298.0	1,736,572.0	2,425,564.0	0.16928	4,09,988	3,553,330	8,275,300	10,294,830
16180	4270	SPD	San Joaquin River	CA	D	1,718,720.0	1,103,323.0	1,608,871.0	1,476,371.3	0.44566	658,221	105,670	42,460	1,084,450
16190	2136	SAD	San Juan Harbor	PR	D	14,330,51020	14,153,403.0	16,98,654.0	14,927,653.0	0.06714	1,002,185	0.000	218,500	1,874,850
16230	4355	SPD	San Pablo Bay & Mare Island Strait	CA	D	36,05,087.0	34,176,885.0	32,66,832.0	34,209,894.7	0.04983	1,694,485	887,190	1,110,700	1,048,90
16260	3213	NCD	Sandusky Harbor	OH	D	5,175,912.0	5,121,549.0	5,258,664.0	5,168,655	0.16855	860,109	1,056,370	3,553,330	8,275,300
15730	4136	SPD	Santa Barbara Harbor	CA	D	11,087.0	0.0	4,987.0	5,556.0	60,88946	862,046	42,460	1,084,450	1,255,830
16340	4396	SPD	Santa Cruz Harbor	CA	D	563.0	0.0	0.0	187.7	3,153,50393	581,308	0.000	0.000	50,500
75985	776	SAD	Savannah Harbor	GA	D	13,386,750.0	14,962,844.0	15,004,910.0	14,952,653.0	0.56917	8,510,274	6,958,465	9,442,200	4,675,910
16550	557	NAD	Schuylkill River	PA	D	8,166,859.0	9,118,567.0	8,25,088.0	8,670,713	0.05385	813,708	1,345,900	432,800	96,700
377	112	NED	Searsport Harbor	ME	D	72,256.0	1,407,497.0	1,35,668.0	1,108,705.3	0.00000	0.000	0.000	0.000	0.000

## DEEP-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)

PROJ. #	NAME	TYPE	ST.	\$1,000'S	# TONS	# TONS	AVERAGE TONS				AVERAGE COST				AVERAGE O&M COSTS PER TON (TOTAL 305)			
							\$1,000'S	# TONS	\$1,000'S	# TONS	\$1,000'S	# TONS	\$1,000'S	# TONS	\$1,000'S	# TONS	\$1,000'S	
67318	4722 NPD	NPS	Seattle Harbor	IWA	D	21,983,200.0	21,633,410.0	22,355,514.0	21,570,708.0	0.02310	507,446	685,070	314,700	787,110	136,600	436,570		
571	49 NED	NED	Seekonk River	RI	D	0.0	79,539.0	30,176.0	36,605.0	0.00003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
72763	4842 NPD	NPA	Sedovia Harbor	AK	D	305.0	76.0	595.0	326.7	8,551,14	2,793	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72744	4809 NPD	NPA	Sergius-Whitestone Narrows	AK	D	474,755.0	316,701.0	159,284.0	316,913.3	0.00315	0.999	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72765	4930 NPD	NPA	Seward Harbor	AK	D	685,927.0	862,134.0	960,874.0	835,211.7	0.00125	1,048	0.000	0.000	0.000	0.000	0.000	0.000	0.000
66700	3759 NCD	NCE	Sheboygan Harbor	WI	D	4,19120	12,765.0	12,497.0	22,391.3	18,989.0	425,433	215,790	663,400	228,240	676,600	314,630		
72897	4805 NPD	NPS	Shipshole Boat Harbor	WA	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
16730	861 SAD	SAC	Shipyard River	SC	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
72845	4808 NPD	NPA	Siltka Harbor	AK	D	546,262.0	380,380.0	51,220.0	326,197.3	0.00090	2,965	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16860	46568 NPD	NPP	Siuslaw River	OR	D	3,050.0	565.0	426.0	10,680.3	74,06181	791,005	457,350	886,200	789,740	732,700	752,571		
72846	4812 NPD	NPA	Skagway Harbor	AK	D	1,949,157.0	65,9554.0	127,883.0	912,158.0	0.00328	2,992	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16830	4606 NPD	NPP	Skipanon Channel	OR	D	65,887.0	57,989.0	36,071.0	53,119.0	3,6587.1	194,347	118,730	3,100	21,310	1,200	0,520		
17180	3752 NCD	NCE	South Haven Harbor	MJ	D	0.0	0.0	0.0	0.0	2,300.0	199,47612	257,795	0,300	1,4040	143,480	132,000	1,405,640	
17300	3501 NCD	NCE	St. Clair River	MJ	D	68,619,828.0	69,061,904.0	75,550,978.0	71,068,603.7	0.01645	1,168,043	1,001,890	720,900	1,424,510	1,092,600	866,270		
67449	4853 NPD	NPA	St. George Harbor	AK	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17350	3733 NCD	NCE	St. Joseph Harbor	MJ	D	545,184.0	485,061.0	631,122.0	53,122.3	2,02364	1,19,319	674,010	1,522,730	923,720	682,000	1,018,055		
74572	886 SAD	SAS	St. Mary's River	GA	D	49,230.0	47,738.0	77,456.0	58,141.7	0.00619	0.360	0.000	0.000	0.000	0.000	0.000	0.000	
17380	3810 NCD	NCE	St. Mary's River	MJ	D	71,222,935.0	69,622,931.0	75,994,043.0	72,261,503.0	0.12001	6,672,118	6,885,810	8,09,380	9,299,890	9,140,500	11,609,630		
10169	4952 NPD	NPA	St. Paul Island Harbor	AK	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74390	2119 SAD	SAB	St. Petersburg Harbor	FL	D	527.0	9,617.0	3,361.0	4,601.7	26,83866	123,507	0.000	0.000	0.000	0.000	19,800	49,330	
39137	317 NED	NED	Stamford Harbor	CT	D	754,195.0	873,395.0	1,115,551.0	914,583.7	0.0395	95,067	0.000	0.000	0.000	0.000	0.000	0.000	
383	111 NED	NED	Stockton Harbor	ME	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17660	3775 NCD	NCE	Sturgeon Bay Harbor	WI	D	114,282.0	148,729.0	87,662.0	116,907.3	3,13906	3,66,628	143,000	151,300	394,900	0.000	276,230		
17720	4220 SPD	SPN	Suisun Bay Channel	CA	D	6,340,058.0	7,088,750	7,556,022.0	6,994,284.3	0.05534	387,047	832,730	407,400	623,370	507,800	826,450		
73597	403 NAD	NAB	Susquehanna River, Havre de Grace	MD	D	90,354.0	1,424,973.0	1,986,122.0	1,437,483.0	0.02548	36,628	0.000	0.000	0.000	0.000	0.000	0.000	
72902	4720 NPD	NPS	Tacoma Harbor	WA	D	20,116,344.0	18,65,709.0	17,615,819.0	18,794,624.0	0.00415	77,952	88,010	156,200	135,500	0.000	0.000		
17960	2021 SAD	SAB	Tampa Harbor	FL	D	46,349,233.0	44,992,777.0	51,902,190	47,776,490.0	0.04506	2,152,575	3,126,680	2,988,500	4,58,050	4,64,260	1,896,810		
74536	543 NAD	NAD	Tampa Harbor, Atlanta River	FL	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000		
74545	543 NAD	NAD	Tampa Harbor, East Bay Channel	FL	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000		
386	120 NED	NED	Tennants Harbor	ME	D	104.0	105.0	111.0	106.7	0.00338	0.000	0.000	0.000	0.000	0.000	0.000		
18130	2404 SWD	SWG	Texas City	TX	D	43,104,101.0	53,652,781.0	44,350,803.0	47,035,885.0	0.02648	1,160,868	860,270	53,000	166,220	1,520,900	424,800		
255	54 NED	NED	Thames River	CT	D	1,185,158.0	1,001,071.0	964,882.0	1,033,703.7	0.00600	0.000	0.000	0.000	0.000	0.000	0.000		
18230	4674 NPD	NPP	Tillamook Bay Bar	OR	D	2,730.0	3,427.0	1,75,920	2,68,87	114,73944	302,759	132,770	3,535,500	15,410	18,600	30,080		
18280	3204 NCD	NCB	Toledo Harbor	OH	D	12,721,759.0	12,446,760.0	13,203,884.0	12,691,801.0	0.04642	4,36,658	3,39,950	4,117,000	3,551,800	8,427,900	2,940,130		
18700	3926 NCD	NCE	Two Harbors	MN	D	11,160,046.0	10,111,058.0	9,288,929.0	10,386,378.0	0.01924	189,857	75,810	1,35,7400	1,37,3550	101,900	3,400		
18710	3761 NCD	NCE	Two Rivers Harbor	WI	D	0.0	0.0	0.0	0.0	0.00000	221,60,07000	221,606	3,69,760	0.000	161,600	37,800		
18750	4664 NPD	NPP	Umpqua River	OR	D	422,005.0	201,190	231,985.0	287,030	6,33271	1,87,677	6,32750	1,31,600	874,090	1,160,400	1,005,560		
449	182 NED	NED	Vineyard Haven Harbor	MA	D	265,130.0	320,601.0	142,038.0	222,589.7	0.00000	0.000	0.000	0.000	0.000	0.000	0.000		
73714	398 NAD	NAN	Walabout Channel	NY	D	115,310,756.0	116,785,760.0	126,101,614.0	119,322,376.7	0.00000	0.000	0.000	0.000	0.000	0.000	0.000		
19500	713 NAD	NAB	Washington Harbor	DC	D	558,570.0	661,580.0	704,207.0	641,452.3	0.59079	378,964	13,550	446,500	429,590	24,300	26,670		
19560	3752 NCD	NCC	Waukegan Harbor	IL	D	519,828.0	576,558.0	603,733.0	566,706.7	1,07020	606,480	836,000	576,490	483,250	923,900	1,892,590		
72923	4618 NPD	NPP	Westport Slough	OR	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000		

**DEEP-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 305)**

PWI (Proj.)	Div.	Dis.	Project Name	ST	TYPE	\$1. Tons	\$1. Tons	\$1. Tons	AVERAGE O&M COST			\$1. Tons	\$1. Tons	\$1. Tons		
									1990-94 TONS	1990-94 O&M \$	1990-94 PER TON					
453	164	NED	Weymouth Back River	MA	D	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000		
19790	149	NED	Weymouth-Fore & Town River	MA	D	19,207,776.0	19,447,857.0	18,865,586.0	19,175,573.0	0.00011	2,148	0.000	0.000	0.000	0.000	
19810	3124	NCD	White Lake Harbor	MI	D	0.0	0.0	0.0	0.0	0.0	0.0	145,478,871.11	145,478,871.11	0.300	158,000	4,830
19890	4700	NPD	Willapa Harbor	WA	D	159,321.0	96,771.0	25,515.0	93,868.0	2,7057	25,6316	5,860	163,900	48,240	525,200	62,600
20230	847	SAD	Wilmington Harbor	NC	D	7,225,980.0	7,813,327.0	7,911,068.0	7,550,128.7	0.54897	4,199,663	3,761,010	5,936,100	8,256,980	2,983,700	5,595,290
20340	554	SAD	Wilmington Harbor	DE	D	3,825,555.0	4,106,459.0	4,503,345.0	4,145,187	0.96473	3,998,926	2,5290	2,210,200	2,634,000	2,407,700	2,569,730
259	315	NED	Wilson Point	CT	D	0.0	0.0	0.0	0.0	0.00000	0.000	0.000	0.000	0.000	0.000	0.000
72852	4804	NPD	Wrangel Narrows	AK	D	717,639.0	569,022.0	547,023.0	61,128.0	0.33966	207,607	13,090	0.000	0.000	0.000	47,820
72893	4712	NPD	WW connecting Port Townsend & Oak Bay WA	D	119,798.0	242,318.0	155,130.0	173,748.7	0.08771	15,239	5,800	7,000	8,580	0.000	43,000	
20290	4672	NPD	Yaquna Bay Harbor	OR	D	195,737.0	156,849.0	107,730.0	153,438.7	12,01373	1,843,371	64,110	1,648,300	1,602,680	2,038,400	1,495,490
73903	648	NAD	York River	VA	D	6,091,529.0	5,478,080.0	6,043,983.0	6,171,196.7	0.00105	6,5058	0.000	12,800	0.000	0.000	0.000
TOTALS						2,412,284,029	1,984,644,883	2,084,340,329	2,160,428,415	0.16449	405,536,521	272,131,210	400,670,360	385,005,100	379,539,100	415,855,530

NOTES: (1) Waterborne Commerce Data from the USACE Waterborne Commerce Statistics Center, New Orleans, LA

(2) O&M Expenditures from the Corps Navigation Cost Recovery Database System reports, USACE, Institute for Water Resources

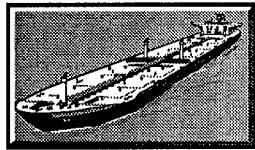
(3) For projects with zero tonnage, the tonnage was set to one for the purpose of computing the average O&M cost per ton.

(4) For projects with zero average O&M (77-94), the o&m was set to one for the purpose of computing the average O&M cost per ton.

PWI = Project Work Item

WTWY = Waterway Code

TYPE D= Deep Draft Project



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX J - Shallow Draft Navigation Projects  
Not Subject to the Inland Waterway Fuel Tax,  
Actual and Average O&M Expenditures,  
Waterborne Commerce and Average Annual  
Tonnages, and Annual O&M Costs per Ton of  
Commerce**

SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,

AVG TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733 )

CH	TITLE	DIS	PROJECT NAME	S.	TIE	TONNAGE	EDITIONS	EDITIONS	TONS	TONS	AVERAGE	AVERAGE COST	AVG O&M	90 O&M	91 O&M	92 O&M	93 O&M	94 O&M
											PER TONS	1994 \$	1977-1994	\$0 O&M	\$0 O&M	\$0 O&M	\$0 O&M	\$0 O&M
76010	656	NAD	Aberdeen Creek	VA	S	23	50	15	29	0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20460		SAD	Adams Creek	SC	S	0	0	0	0	0.659	0.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74547		POD	Agana Small Boat Harbor	GU	S	0	0	0	0	3,429.391	3,429	2,630	0.000	0.000	0.000	0.000	0.000	0.000
74177	3763	NCD	Algoma Harbor	WI	S	0	0	0	0	50,408.200	50,408	0.000	0.000	0.000	0.000	293,200	37,100	
73968	266	NAD	Alloway Creek	NJ	S	0	0	0	0	1,303.573	1,304	0.000	0.000	0.000	0.000	0.000	0.000	
74573	882	SAD	Altamaha Ocenee & Ocniugee Rivers	GA	S	149	1520	80	583	0.472	0.275	0.000	0.000	0.000	0.000	0.000	0.000	
73958	715	NAD	Anacostia River Basin	DC	S	553570	651580	704207	641452	0.242	155.031	0.000	0.000	129,240	2,058,900	92,000		
74478	2123	SAD	Arcidae River	FL	S	552	1059	1500	1040	9.346	9.723	0.000	0.000	0.000	0.000	4,900	170,540	
74251		NCD	Andalusia Harbor	IL	S	0	0	0	0	8,646.631	8,647	97,200	4,000	55,400	0.000	0.000	0.000	
87009	1295	NED	Andrews River	MA	S	0	0	0	0	24,737.591	24,738	56,480	0.000	0.000	0.000	83,200	0.080	
430	2183	SAD	Apalachicola Bay	FL	S	0	0	0	0	231,551.110	231,551	88,880	123,000	34,560	153,000	317,900		
30380	668	NAD	Appomattox River	VA	S	1366134	4180678	3019519	2855444	0.092	262,218	265,480	1,722,900	1,670,890	744,100	255,810		
579	456	NAB	Aquila Creek	VA	S	0	0	0	0	14,322	0.014	0.000	0.000	0.000	0.000	0.000		
46063		NCD	Arcadia Harbor	MI	S	0	0	0	0	243,485.293	243,489	84,180	121,400	64,060	78,500	101,140		
7604	785	SAD	Atlantic Beach Channel	NC	S	1867	2066	4	1312	6,440	8,452	145,370	0.000	0.000	0.000	0.000		
770	3631	NCD	Au Sable Harbor	MI	S	0	0	0	0	21,069	21,069	11,740	249,200	8,860	0.100	0.050		
74036		POD	Ausasi Small Boat Harbor	AS	S	0	0	0	0	3,934.094	3,934	0.000	0.000	0.000	0.000	21,900	33,500	
87282		POD	Aunuu Harbor	AS	S	0	0	0	0	55,667.049	55,667	22,750	34,900	56,400	317,000	423,620		
76024	770	SAD	Avon Harbor	NC	S	825	789	20	545	51,613	28,112	0.000	0.000	0.000	0.000	0.000	0.000	
73551	491	NAD	Bach Creek	MD	S	150	293	233	225	0.270	0.961	0.000	0.000	0.000	0.000	0.000	0.000	
74482	2110	SAD	Bakers Haulover Inlet	FL	S	0	0	0	0	7,776.533	7,777	0.000	0.000	0.000	0.000	0.000	0.000	
900	2066	LAID	Barataria Bay Waterway	LA	S	15338324	1872704	727394	1379474	1.075	1,482,328	1,230,570	2,024,700	233,270	295,400	376,350		
44036	3234	NCD	Barcelona Harbor	NY	S	0	0	0	0	125,938.867	125,940	0.000	0.000	0.000	0.000	0.000	0.000	
950	284	NAD	Barnegat Inlet	NJ	S	1199	586	452	746	941,594	702,116	979,610	888,100	72,950	988,200	1,113,180		
74591	823	SAD	Bay River	NC	S	5727	6254	191	4057	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
74320	3065	NCD	Bayfield Harbor	WI	S	2632	26728	29135	27432	0.047	1,285	0.000	0.000	0.000	0.000	0.000	0.000	
155	2230	LAD	Bayou Bonouca	LA	S	7194	8702	122146	46114	0.017	0.806	0.000	0.000	0.000	0.000	0.000	0.000	
74520	2200	SAD	Bayou Coden	AL	S	0	0	0	0	94,565.150	94,565	5,300	33,250	0.420	1,500	22,200		
1110	2235	LAD	Bayou Dupre	LA	S	0	0	0	0	144644	0.000	0.000	0.000	0.000	0.000	0.000		
158	2231	LAD	Bayou Lacombe	LA	S	8750	137	0	2962	0.272	0.806	0.000	0.000	0.000	0.000	0.000	0.000	
2310	2070	LAD	Bayou Lafourche Jump WW	LA	S	2031549	2214254	3114366	2453390	0.019	46,254	134,180	2,214,800	76,200	1,200	1,758,000		
162	2242	LAD	Bayou Plaquemine Brule	LA	S	0	614	2662	1092	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
24	2237	LAD	Bayou Sagnette Waterway	LA	S	662	2757	1653	1691	15,276	25,826	46,150	204,500	0.760	3,000	0.000		
1150	2244	LAD	Bayou Teche	LA	S	956370	1088423	1045451	1045451	0.347	362,245	265,500	295,700	573,350	379,800	1,377,480		
1160	2064	LAD	Bayou Teche Vermillion River	LA	S	1104838	1592812	1433807	1377152	0.025	34,907	0.000	8,900	0.000	0.000	24,600		
165	2061	LAD	Bayou Terrebonne	LA	S	198673	2246633	2508338	224735	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
166		LAD	Bayou Vermillion	LA	S	0	0	1421487	1421487	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
90005	2054	LAD	Bayous La Louire St Maio	LA	S	48418	44102	34908	42476	0.000	0.000	0.000	0.000	0.000	0.000	0.000		

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

EN	WTWY	DV	DES.	PROJECT NAME	ST	TYPE	2.0 TONS	BTONS	BTONS	TONS	AVERAGE COST 1992-1994		AVG O&M (1994 \$)	\$1,000 (1,000 DOLLARS)
											TONS	TONS	TONS	TONS
328	102	NED	NED	Beals Harbor	ME	S	0	20	0	7	0.150	0.000	0.000	0.000
1290	761	SAD	SAW	Balhaven Harbor	NC	S	7204	35061	26025	22763	0.905	20,591	0.000	0.000
1350	240	SWD	SWF	Benbrook Lake	TX	S	0	0	0	0	121,192	400	121,192	72,200
100004	4346	SPD	SPN	Berkeley Marina	CA	S	14044	34100	0	16048	0.000	0.000	0.000	50,900
1004	4346	SPD	SPN	Bartley Harbor	CA	S	14044	34100	0	16048	0.000	0.000	0.000	50,900
24100	4847	NPD	NPA	Bethel Small Boat Harbor	AK	S	27031	46960	38411	37467	0.547	20,487	0.000	32,260
1410	3846	NCD	NCE	Big Bay Harbor	MI	S	0	0	0	0	20,676	0.006	20,676	21,200
2240	LMD	LMN	LMN	Big Pigeon & Little Pigeon Bayous	LA	S	0	0	131068	131068	0.000	0.000	0.000	0.000
10222	2345	ORD	ORH	Big Sandy River	WV	S	22400387	23471224	22175800	222682804	0.015	344,344	697,940	817,300
612	3785	NCD	NCE	Big Shumico Harbor	WI	S	0	23000	0	7667	7.534	57,759	0.000	148,800
73869	259	NAD	NAP	Big Timber Creek	NJ	S	0	0	0	0	1,207,960	1.208	0.000	223,150
1520	2002	SAD	SAM	Biloxi Harbor	MS	S	1896832	1781628	1607458	1761973	0.384	676,621	136,750	930,720
74321	2322	NCD	NCS	Black River	WI	S	222965	92499	161355	162273	0.000	0.000	0.000	102,700
1640	3861	INCD	NCE	Black River, Upper Peninsula	MI	S	0	0	0	0	38,836	301	36,835	85,640
30290	709	NAD	NAB	Black Walnut Harbor	ND	S	0	0	0	0	21,898,456	21,898	0.000	12,100
23230	2190	SAD	SAM	Blackwater River	FL	S	2687	26816	10434	10434	0.907	9,464	0.000	26,080
72913	4744	NPD	NPS	Blaine Harbor	WA	S	0	3687	2544	2070	0.000	0.000	0.000	595,630
1850	4392	SPD	SPN	Bodega Bay	CA	S	5806			1935	53,620	103,773	0.000	172,440
87750	NCD	NCE	NDL	Bolles Harbor	MI	S	0	0	0	0	59,783,646	59,784	0.000	62,500
76060	2213	SAD	SAM	Bon Secour River	AL	S	7015	6493	6204	6571	10,836	71,200	551,940	1,110
50045	1239	NAD	NAB	Bonum Creek	VA	S	0	1613	1250	954	25,213	24,061	0.000	184,000
234	308	NED	NED	Branford Harbor	CT	S	0	0	0	0	74,384,676	74,385	781,820	30,900
561	471	NAD	NAB	Branson Cove	VA	S	828	725	814	789	0.482	0.380	0.000	27,800
73553	463	NAD	NAB	Bretton Bay	MD	S	259077	189540	78826	189148	0.000	0.000	0.000	35,170
582	641	NAD	NAO	Broad Creek	VA	S	51	35	0	29	1,561,959	44,776	0.000	2,700
73554	445	NAD	NAB	Broad Creek	MD	S	0	0	0	0	2,657,883	2,658	0.000	25,400
41057	353	NAD	NAN	Bronx River	NY	S	154982	98659	90194	114612	1,839	209,637	88,570	25,400
87553	SAD	SAC	Brookgreen Garden Canal	SC	S	0	0	0	0	103,592	0.104	0.000	0.000	
41022	224	NAD	NAN	Brown Creek	NY	S	3732		2822	2185	0.000	0.000	101,400	0.000
556	1268	NED	NED	Bullock's Point Cove	RI	S	0	0	0	0	1,661,299	1,661	0.000	0.000
73727	509	NAD	NAN	Burlington Harbor	VT	S	10776		3592	0	1,253	3,980	0.000	0.000
87387	3791	NCD	NAO	Burns Waterway Small Boat Harbor	IN	S	0	0	0	0	58,889,748	58,890	218,290	112,610
402	1176	NED	Buttermilk Bay Channel	MA	S	0	0	0	0	7,162,311	7,162	0.000	0.000	
20600	2086	SAD	SAM	Cadet Bayou	MS	S	0	0	0	0	100,148,666	100,149	0.210	0.000
404	43	NED	NAO	Canalsit Channel	MA	S	270	71	0	114	0.009	0.000	0.000	0.000
583	636	NAD	NAO	Carters Creek	VA	S	44	1819	23	629	0.002	0.000	0.000	0.000
74199	3632	NCD	NCE	Cassenville Harbor	MI	S	0	0	0	0	29,568,773	29,569	0.000	23,300
74596	812	SAD	SAW	Castile River	NC	S	512	244	13	256	0.004	0.000	0.000	0.000

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL OEM EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE OEM COSTS (1977-1994) ,**

**AVERAGE TONNAGES (1992-1994) AND OEM COSTS PER TON (TOTAL 733)**

ENR WEEK	DIV	PROJECT NAME	ST	TYPE	# TONS	# TONS	SATIONS	TONS	1992-1994	AVERAGE COST (1994 \$)	AVG OEM (1977-1994)	\$ OEM		
\$1000 DOLLARS														
73320	NCD	NCB	NY	S	0	0		0	11,182,927	11,830	18,910	31,000	48,200	
2810	2401	SWD	SWG	Cedar Bayou	TX	S	302824	349680	321395	324633	0.369	119,914	0.300	
67211	2129	NAD	NAP	Cedar Creek	NJ	S	0	0	0	20,444,771	20,445	0.000	25,000	0.000
74484	6315	SAD	SAJ	Cedar Keys Harbor	FL	S	3666	1631	0	1766	0.001	0.000	0.000	0.000
74601	842	SAD	SAW	Channel connect Thoroughfare Bay to Cedar	NC	S	280	6383	4040	3568	0.000	0.000	0.000	0.000
2890	8213	SAD	SAW	Channel from Back Sound to Lookout Bluff	NC	S	8188	10342	5177	7902	17,016	134,464	26,330	8,400
	SWD	SWD	SWD	Channel to Red Bluff	TX	S	0	0	0	79,261,611	79,262	0.000	0.000	853,000
12150	2113	SAD	SAJ	Channel Naples-Big Marco Pass	FL	S	1347	1516	0	954	149,243	142,128	35,280	22,700
39001	175	NED	NED	Chatham Harbor	MA	S	4456	4164	0	2880	63,706	183,474	781,050	154,900
73262	379	NAD	NAN	Cheesequake Creek	NJ	S	0	0	0	24,246,471	24,346	59,510	45,500	75,000
8215	248	NAD	NAP	Chesapeake & DE Canal, St George's Bridge	DE	S	13529305	14823953	13633586	13698615	0.107	1,488,337	0.000	0.000
19550	600	NAO	NAO	Chesapeake Bay-Delaware Bay	VA	S	950	488	106	515	2,096,076	877,750	921,800	1,218,250
87303	295	NAD	NAO	Chesconneck Creek	VA	S	14	136	2	51	0.020	0.000	0.000	0.000
73557	409	NAD	NAB	Chester River	MD	S	102747	12107	31229	46894	2,817	137,155	19,620	0.000
3130	4650	NPD	NPP	Chetco River	OR	S	6893	36360	5315	16189	26,809	433,881	373,100	500,700
584	1334	NAD	NAO	Chincoteague Bay	VA	S	0	0	0	0	18,171,067	18,171	0.000	113,100
10890	730	NAD	NAO	Chincoteague Bay Channel	VA	S	732	89	8	276	0.004	0.000	0.000	0.000
88918	731	NAD	NAO	Chincoteague Harbor of Refuge	VA	S	622	284	104	337	0.003	0.000	0.000	0.000
30730	2405	SWD	SWG	Chocolate Bayou	TX	S	3343072	3715107	3715626	3604668	0.016	59,263	0.000	0.000
73558	423	NAD	NAB	Choprank River	MD	S	226743	248126	291988	255229	0.009	2,289	0.000	0.000
73752	808	SAD	SAW	Chowan River	NC	S	313583	197843	199550	237092	0.000	0.000	0.000	0.000
73560	707	NAD	NAB	Clairborne Harbor	MD	S	0	0	0	40,631,372	40,631	0.000	0.000	0.000
3330	2014	SWD	SWG	Clear Creek and Lake	TX	S	0	66	2491	852	12,917	11,009	0.000	0.000
3400	2121	SAD	SAJ	Cleantwater Pass	FL	S	2717	6	3450	2058	34,217	70,408	15,580	0.800
39116	306	NED	Clinton Harbor	CT	S	0	0	0	0	10,636,978	10,637	0.000	0.000	0.000
3490	NCD	NCE	Clinton River	MI	S	0	0	0	0	337,645,246	337,645	103,180	483,900	1,118,350
556	183	NED	Coastal Island Harbor	RI	S	0	0	542	542	0.002	0.000	0.000	0.000	0.000
3540	267	NAD	Coansey River	NJ	S	2837	5677	2	2839	83,509	237,054	953,820	1,900	
3560	166	NED	Cobasset Harbor	MA	S	0	0	0	0	11,973,333	11,973	0.000	0.000	0.000
72863	8694	NPD	NPS	Columbia River bin Wenatchee Falls	WA	S	0	15	0	5	0.200	0.000	0.000	0.000
23080	4681	NPD	NPP	Columbia River b/w Chinook & Sand Island	OR	S	0	2040	1415	1152	325,184	374,504	51,250	249,300
3570	4680	NPD	NPP	Columbia River; Baker Bay	OR	S	0	7411	10224	5312	41,476	241,047	54,870	38,300
73680	364	NAD	NAN	Coney Island Creek	NY	S	14639	19001	9411	14350	0.220	3,157	53,710	0.000
3870	4662	NPD	NPP	Coos and Millicoma River	OR	S	0	0	0	124,332,614	124,333	100,450	19,000	0.000
3900	4656	NPD	NPP	Coquille River	OR	S	47	71703	14	23921	14,845	395,107	189,060	525,400
3950	4814	NPD	NPA	Cordova Harbor	AK	S	99656	104103	31766	78508	0.505	39,676	0.000	0.000
338	103	NED	Corea Harbor	ME	S	12	15	1257	428	0	0.002	0.000	0.000	0.000
3970	3920	INCD	INCE	Cornucopia Harbor	WI	S	0	0	0	41,161,318	41,161	0.000	46,500	63,740

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1997-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

ENR	WTHM	DIA	DIS	PROJECT NAME	SI.	TYPE	SECTIONS	EDITIONS	EDITIONS	AVERAGE		AVERAGE COST				
										(1994 \$)	1977-1994	\$0 O&M	\$1 O&M	\$2 O&M	\$4 O&M	
(1,000'S DOLLARS)																
4210	4624	NPD	NPP	Cowitch River	WA	S	0	194	16	70	349,316	24,452	0,000	0,000	0,000	
72788	4834	NPD	NPA	Craig Harbor	AK	S	1671	1126	2048	1615	4,624	7,467	0,000	0,000	76,300	
585	617	NAD	NAO	Cranes Creek	VA	S	41			14	3,235,800	44,223	0,000	182,000	39,700	
339	114	NED	NED	Criehaven Harbor	ME	S	0	0	0	0	355,556	0,356	0,000	0,000	0,000	
51950	712	NAD	NAB	Cristfield Harbor	MD	S	4365	6696	1847	4303	23,200	99,822	1,097,840	0,000	49,400	
4300	2044	SAD	SAJ	Cross Florida Barge Canal	FL	S	0	0	0	0	1,588,815,621	1,588,816	1,720,060	1,497,000	905,400	
74488	2127	SAD	SAJ	Crystal River	FL	S	1217	44706	0	15308	0,055	0,847	0,000	0,000	191,300	
469	185	NED	NED	Cutthunk Harbor	MA	S	1185	906	719	937	33,043	30,950	0,000	0,000	102,000	
74576	718	SAD	SAS	Darien Harbor	CA	S	6212	3172	174	3186	0,000	0,000	0,000	0,000	6,200	
4480	2194	SAD	SAM	Dauphin Island Bay	AL	S	1652	17249	173	6358	21,815	138,702	569,980	4,500	43,380	
42017	645	NAD	NAO	Davis Creek	VA	S	147	89	47	94	0,011	0,000	0,000	0,000	90,700	
75117	660	NAD	NAO	Deep Creek, Newport News	VA	S	185	182	185	184	1,145,229	210,722	111,520	1,037,800	62,200	
72865	4614	NPD	NPP	Deep River	WA	S	2			1	1,500	0,000	0,000	0,000	141,000	
4610	4687	NPD	NPP	Depoe Bay	OR	S	323	158	133	205	388,321	79,476	11,110	77,700	5,400	
4680	3812	NCD	NCE	Detour Harbor	MI	S	89	141	0	77	305,729	23,439	0,000	0,000	43,380	
2015	570	SWD	SWG	Dickinson Bayou	TX	S	0	0	555862	555862	0,000	0,000	0,000	0,000	16,240	
4880	4846	NPD	NPA	Dillingham Harbor	AK	S	12273	20472	22717	18489	28,819	532,831	535,590	5,160	388,230	
20710	209	SAD	SAM	Dog and Fowl Rivers	AL	S	0	0	0	0	117,225,417	117,225	464,840	0,100	201,900	
4930	2013	SWD	SWG	Double Bayou	TX	S	240		1	80	868,129	69,740	0,000	0,000	630,100	
72789	4811	NPD	NPA	Douglas Harbor	AK	S	0	50	2771	940	3,733	3,567	0,000	0,000	289,700	
26060	836	SAD	SAW	Drum Inlet	NC	S	1734			578	14,800	8,554	0,000	12,600	6,680	
72790	4871	NPD	NPA	Dry Pass	AK	S	0	0	0	0	9,142,469	9,142	0,000	0,000	140,500	
73580	429	NAD	NAB	Duck Point Cove	MD	S	821	2360	1254	1478	11,258	16,643	0,000	0,000	0,000	
5080	168	NED	NED	Duxbury Harbor	MA	S	0	0	0	0	58,105,367	58,105	0,000	0,000	0,000	
22870	3459	NCD	NCE	Eagle Harbor	MI	S	0	0	0	0	1,843,350	1,843	0,050	0,000	0,000	
41004	348	NAD	NAN	East Chester Creek	NY	S	1194015	1115389	1177358	1162254	0,134	156,226	64,940	161,500	172,700	
4980	2189	SAD	SAM	East Pass Channel	FL	S	0	0	0	0	557,877,328	557,877	120,790	635,700	106,020	
5200	2209	LMD	LMK	East Pearl River	MS	S	235559	226213	361955	275909	0,056	18,190	0,000	0,000	236,600	
5220	1226	NAD	NAN	East Rockaway Inlet	NY	S	962000	954000	934000	950000	0,784	745,116	834,650	370,300	215,600	
75118	101	NED	NED	Eastport Harbor	ME	S	245149	15249	192376	150925	0,124	18,661	0,000	0,000	202,240	
74489	2105	SAD	SAJ	Eau Gallie Harbor	FL	S	0	0	0	0	46,443,178	48,443	0,000	0,000	1,920	
74604	760	SAD	SAW	Edenton Harbor	NC	S	76761	42754	51702	0,000	0,000	0,000	0,000	0,000	0,000	
76148	764	NPD	NPS	Edmonds Harbor	WA	S	0	0	0	0	15,701,284	15,701	0,000	0,000	0,000	
72792	4872	NPD	NPA	Egglek River	AK	S	528	4367	5974	3623	0,277	1,005	0,000	0,000	2,377,520	
72793	4838	NPD	NPA	Elin Cove	AK	S	682	642	441	2,276	1,005	0,000	0,000	0,000	0,000	
88833	2027	ORD	ORH	Elk River	WV	S	2162734	2231764	22283974	22142991	0,003	69,306	288,800	1,130	295,600	0,240
72866	4616	NPD	NPP	Elochman Slough	WA	S	0	0	0	0	10,476,702	10,477	122,270	0,000	0,000	0,000
5620	2191	SAD	SAM	Escambia-Cooncuth Rivers	FL	S	2458701	2561140	2550784	2425352	0,020	47,804	27,330	0,000	7,320	0,000

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733 )**

ENR	WATER	DRAFT	DIS	PROJECT NAME	SIX	TYPE	22,000 TONS	BILLIONS	TONS	AVERAGE		AVG O&M TONS 1992-1994	\$10/AM 1994 \$	\$20/AM 1977-1994	\$30/AM 1994 \$	\$40/AM 1994 \$
										1994 \$	1994 \$					
74490	2112	SAD	SAJ	Everglades Harbor	FL	S	974	1111	0	695	0.001	0.000	0.000	0.000	0.000	0.000
415	177	NED	NED	Falmouth Harbor	MA	S	1355	1033	937	1108	15.672	17.369	0.000	0.000	0.000	0.000
74605	822	SAD	SAW	Fair Creek	NC	S	3507	3185	128	2273	33.598	76.508	217.560	360.300	5.650	0.000
5880	220	NAD	NAN	Fire Island Inlet	NY	S	0	0	0	0	1,196.397	209	1,196.397	1,559.960	51.500	1,514.800
73583	431	NAD	NAB	Fishing Bay	MD	S	2239	2060	319	1539	62.331	96.871	486.370	0.000	0.000	0.000
73584	483	NAD	NAB	Fishing Creek	MD	S	2653	1065	0	1239	98.216	121.723	17.430	402.300	38.020	0.000
5970	2193	SAD	SAM	Fly Creek	AL	S	0	0	0	0	46,447.566	46.448	86.870	0.000	87.600	179.300
6220	2114	SAD	SAJ	Fort Myers Beach	FL	S	2074	16063	17775	11971	4.548	54.448	0.000	0.000	0.000	0.000
6610	3779	NCD	NCE	Fox River	WI	S	0	0	0	0	1,955.793	712	1,955.794	1,461.850	1,708.100	1,681.000
6200	2247	LMD	LMN	Freshwater Bayou	LA	S	199653	452737	394652	349024	4.587	1,600.949	2,572.860	1,964.500	1,039.880	1,376.600
72794	4873	NPD	NPA	Gaspineau Channel	AK	S	0	0	0	0	1,112.094	1.112	0.000	0.000	0.000	0.000
73686	215	NAD	NAN	Glen Cove Creek	NY	S	108720	143830	178070	143540	0.053	7.638	0.000	0.000	0.000	0.000
6650	1332	NAD	NAB	Goose Creek	MD	S	0	0	0	0	737.778	0.738	0.000	0.000	0.000	0.000
6650	2040	SAD	SAM	Grand Lagoon	FL	S	0	0	0	0	109.778	0.110	0.000	0.000	0.000	0.000
6760	2400	SWD	SWF	Grapevine Lake	TX	S	0	0	0	0	61,745.211	61.745	70.000	17.700	17.500	35.200
24920	4882	NPD	NPP	Grays River	WA	S	0	31	0	10	0.097	0.000	0.000	0.000	0.000	0.000
74741	853	SAD	SAC	Great Pee Dee River	SC	S	6	3	1	3	0.300	0.000	0.000	0.000	0.000	0.000
60570	221	NAD	NAN	Great South Bay	NY	S	9711	10280	10620	10214	8.038	82.095	0.000	100.000	357.680	1,165.500
6920	1175	NED	Green Harbor	MA	S	0	1	1	1	275.620	545	183.747	180.400	318.000	113.270	
73692	527	NAD	NAN	Greenport Harbor	NY	S	0	4614	0	1538	0.001	0.000	0.000	0.000	0.000	0.000
20860	677	NAD	NAO	Greenvale Creek	VA	S	6	3	0	3	0.333	0.000	0.000	0.000	0.000	0.000
780	677	NAD	NAO	Greenvale Creek, Lane County	VA	S	6	3	0	3	5,794.429	17.383	0.000	192.000	0.000	19.800
7040	319	NED	NED	Greenwich Harbor	CT	S	2129	9576	0	3902	0.000	0.000	0.000	0.000	0.000	0.000
46103	3714	NCD	NCE	Greilkville Harbor	MI	S	221365	220931	282227	241508	0.021	5.146	0.000	0.000	0.000	0.000
239	307	NED	NED	Gulfford Harbor	CT	S	0	0	0	0	18,620.556	18.621	0.000	0.000	0.000	335.170
87619	700	POD	POD	Haleiwa Small Boat Harbor	HI	S	0	0	0	0	7,437.717	7.438	0.000	0.000	0.000	0.000
74701	4386	SPD	SPN	Half Moon Bay Harbor	CA	S	4813	1604	1604	101.538	162.900	0.000	0.000	0.000	0.000	
72918	4716	NPD	NPS	Hammersley Inlet	WA	S	311952	384438	499939	398776	0.007	2.856	5.800	7.000	8.580	0.000
73775	5738	NAD	NAO	Hampton Creek	VA	S	206447	378156	400092	328232	0.152	49.881	0.000	0.000	0.000	0.000
39063	1167	NED	NED	Hampton Harbor	NH	S	0	0	0	0	82.501	39.2	82.501	0.000	0.000	0.000
74258	4303	NCD	NCR	Hannibal Small Boat Harbor	MO	S	0	0	0	0	3,423.282	3.423	0.000	0.000	0.000	0.000
443	1275	NED	NED	Harbor of Refuge at Sandy Bay	MA	S	10	11	8	10	0.103	0.000	0.000	0.000	0.000	0.000
55550	3614	NCI	NCE	Hanville Harbor	MI	S	0	0	0	0	31,983.553	31.984	0.000	0.000	0.000	174.700
7380	626	SAD	SAS	Hartwell Lake	GA	S	0	0	0	0	137,170.569	137.171	54.000	105.000	108.800	21.600
522	303	NED	NED	Hay (West Harbor), Fisher's Island	NY	S	2039	2027	2065	2044	0.000	0.000	0.000	0.000	0.000	0.000
7440	2233	LMD	LMM	Helena Harbor	AR	S	2185788	1343283	1989408	1839493	0.188	346.472	257.950	180.200	46.120	22.100
73695	514	NAD	NAN	Hempstead Harbor	NY	S	677617	835337	10063382	839779	0.007	6,040	70.380	40.000	0.000	0.000
73585	484	NAD	NAB	Herring Bay & Rockford Creek	MD	S	0	0	0	0	61,570.502	61.571	4.880	0.000	0.000	58.500

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

EN	NAME	DIV	DIS	PROJECT NAME	ST	TYPE	22 TONS	32 TONS	44 TONS	54 TONS	1992-1994	AVERAGE COST (1994 \$)			\$100M 1977-1994	\$100M 1994 \$)	\$100M 1994 \$)	
												TONS	TONS	TONS				
73586	473	NAD	NAB	Herring Creek		MD	S	0	0	0	0	5,463,850	5,464	0,000	0,000	0,000	0,000	0,000
62011	473	NAD	NAB	Herring Creek, Tall Timbers		MD	S	0	0	0	0	202,000	202	0,000	0,000	0,000	0,000	0,000
74496	2126	SAD	SAJ	Homosassa River		FL	S	1217	1686	0	968	0,001	0,000	0,000	0,000	0,000	0,000	0,000
22690	428	NAD	NAB	Honga River; Tar Bay		MD	S	18170	22893	7249	16104	14,595	235,044	1,041,240	0,000	0,030	77,600	33,500
73776	733	NAD	NAO	Horn Harbor		VA	S	50	42	17	36	271,860	9,878	110,930	0,200	0,000	0,000	0,000
74495	2131	SAD	SAJ	Horseshoe Cove		FL	S	1611	960	0	857	2,482	2,127	0,000	0,000	0,000	9,500	28,610
7250	626	NAD	NAO	Hoskins Creek		VA	S	64200	57700	82862	68254	0,144	9,799	0,000	0,000	0,000	0,000	0,000
73699	519	NAD	NAN	Huntington Harbor		NY	S	0	0	0	0	647,778	0,648	0,000	0,000	0,000	0,000	0,000
421	176	NED	NED	Iyannis Harbor		MA	S	111403	120650	0	77351	0,509	39,347	0,000	0,000	0,000	0,000	0,000
8110	235	NAD	NAP	Indian River Inlet and Bay		DE	S	0	0	0	0	190,667,577	190,668	103,050	475,500	78,620	2,500	243,070
46140	NC	NCE	Inland Route		MI	S	0	0	0	0	35,593,467	35,593	29,360	29,200	45,200	24,200	57,880	
2480	2062	SAD	SAJ	Intra WW Caloosahatchee Rto Andote R		FL	S	805121	1215148	887,602	969,980	0,386	373,765	36,260	63,800	47,570	79,200	294,890
8220	NC	NC	Irondequoit Bay		NY	S	0	0	0	0	52,610,707	52,611	0,000	26,200	36,800	52,400	0,310	
73587	421	NAD	NAB	Island Creek		MD	S	249	700	240	396	1,105	0,438	0,000	0,000	0,000	0,000	0,000
73588	472	NAD	NAB	Island Creek-St George Island		MD	S	0	0	0	0	32,215,169	32,215	0,030	0,000	0,300	0,000	33,160
154	154	NED	NED	Island End River		MA	S	0	0	0	0	46,2839	46,2839	0,000	0,000	0,000	0,000	0,000
347	10	NED	NED	Isle Au Haut Thoroughfare		ME	S	263	794	301	453	22,597	10,229	0,000	0,000	0,000	0,000	0,000
81150	233	NAD	NAP	IWW, Chincoteague Bay to Delaware Bay		DE	S	0	0	0	0	4,158,552	4,159	16,030	0,000	0,100	0,000	0,000
10045	2047	SAD	SAJ	IWW, Miami to Key West		FL	S	0	0	0	0	66,4486	66,4486	0,000	0,000	0,000	0,000	0,000
81170	237	NAD	NAP	IWW, Rehoboth Bay to Delaware Bay		DE	S	0	0	0	0	212,374,727	212,375	31,220	40,800	119,970	187,500	1,903,200
27031	612	NAD	NAO	Jackson Creek		VA	S	90	20	89	66	0,015	0,000	0,000	0,000	0,000	0,000	0,000
1001	2179	SAD	SAJ	Johns Pass, Pinellas County		FL	S	0	0	0	0	179,173,448	179,173	189,100	265,000	0,000	670,400	60,720
41006	226	NAD	NAN	Jones Inlet		NY	S	4400	0	0	1467	32,359	47,460	73,000	3,510,600	0,000	0,000	0,000
348	26	NED	NED	Jostas River		ME	S	0	0	0	0	11,016,667	11,017	0,000	0,000	0,000	0,000	0,000
72797	4810	NPD	NPA	Juneau Harbor		AK	S	163151	193313	222429	192964	0,033	6,398	0,000	0,000	0,000	0,000	0,000
11111	3210	NCD	NCB	Kelley's Island Harbor		OH	S	564373	564011	521228	549871	0,000	0,000	0,000	0,000	0,000	0,000	0,000
8900	25	NED	NED	Kennebunk River		ME	S	0	0	0	0	35,740,817	35,741	0,000	0,000	9,500	0,000	0,000
8980	377	NAD	NAN	Keypoint Harbor		NJ	S	0	0	0	0	68,218,271	68,218	548,810	28,400	0,000	0,000	0,000
73598	418	NAD	NAB	Knaps Narrows		MD	S	0	3	0	1	129,698,121	129,698	4,280	0,000	46,230	24,000	0,000
48900	3925	NCD	NCE	Knife River Harbor		MN	S	0	0	0	0	5,732,556	5,733	0,000	0,000	0,000	0,000	0,000
74607	673	SAD	SAW	Knobbs Creek		NC	S	34117	106061	58758	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
9280	2188	SAD	SAM	La Grange Bayou		FL	S	210648	21340	237039	220675	0,020	4,317	0,000	2,300	7,300	0,000	7,900
9450	3864	NCD	NCE	La Pointe Harbor		WI	S	14964	21628	20255	18949	0,701	13,277	0,000	41,200	70,000	0,700	0,440
73590	422	NAD	NAB	La Trappe River		MD	S	0	0	0	0	1,410,739	1,411	0,000	0,000	0,000	0,000	0,000
9210	3838	NCD	NCE	Lac La Belle Harbor		MI	S	0	0	0	0	31,928,994	31,929	0,000	0,000	0,000	0,000	93,410
73778	670	NAD	NAO	Lafayette River		VA	S	13131	1003	0	4711	4,037	19,022	0,000	47,900	326,000	2,700	0,000
9281	1324	NED	NED	Lagoon Pond, Martha's Vineyard		MA	S	17	8	0	8	518,001	4,317	0,000	2,300	7,300	0,000	7,900
88812	NC	NCD	NC	Lake City Small Boat Harbor		MN	S	0	0	0	0	3,767,444	3,767	0,000	0,000	0,000	0,000	0,000

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733 )**

EN	NAME	DIS	PROJECT NAME	SI.	TYPE	STATONS	MILENS	TONS	AVERAGE TONS 1992-1994	AVERAGE COST		AVG O&M (\$ 1994 \$)	91 O&M (\$ 1994 \$)	92 O&M (\$ 1994 \$)	93 O&M (\$ 1994 \$)				
										PER TONS	(\$1,000 DOLLARS)								
9340	535	NAD	NAN	Lake Montauk Harbor	NY S	0	0	0	0	48,465	5,930	48,466	23,670	213,100	76,900	100,000	95,850		
9360	2269	LND	LMK	Lake Providence Harbor	LA S	680170	489318	713258	627582	0.371	232,663	234,770	125,500	61,1540	2,800	174,500	174,500		
72868	4685	NPD	NPP	Lake River	WA S	4041	3858	5216	4372	0.800	3,497	0.000	0.000	0.000	0.000	0.000	0.000		
73855	245	NAD	NAP	Lepisic River	DE S	0	0	10	10	0.100	0.000	0.000	0.000	0.000	0.000	0.000			
46018	3716	NCD	NCE	Leland Harbor	MI S	0	0	0	0	141,794	0,036	141,794	120,920	194,000	133,720	114,700	109,350		
9700	4632	NPD	NPP	Lewis River	WA S	0	0	0	0	16,379	3,383	16,879	0.000	0.000	0.000	0.000	0.000		
10220	2340	ORD	ORL	Lleking River Open Channel	KY S	0	0	0	0	375481	0,019	7,090	12,310	13,000	14,700	17,000	19,000		
74855	SWD	SWG	Little Bay	TX S	0	0	0	0	0	21,329	4,444	21,829	0.000	0.000	0.000	0.000	0.000		
189	189	LMD	LNN	Little Caillou Bayou	LA S	0	0	0	401,387	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73591	412	NAD	NAB	Little Creek, Kent Island	ND S	317	332	505	385	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
509	136	NED	NED	Little Harbor	NH S	0	0	0	0	4,806	6,677	4,807	0.000	0.000	0.000	0.000	85,520		
71556	2346	ORD	ORH	Little Kanawha River	WV S	0	0	0	173840	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73779	610	NAD	NAO	Little Machipongo River	VA S	100	261	0	120	238,780	0.000	28,733	0.000	0.000	0.000	0.000	0.000	0.000	
562	301	NED	NED	Little Narragansett Bay	RI S	0	0	0	0	172,944	0.173	0.000	0.700	0.000	0.000	0.000	0.000		
9900	350	NAD	NAN	Little Neck Bay	NY S	0	6843	0	2281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73856	243	NAD	NAP	Little River	DE S	0	0	0	0	1,572	6,23	1,573	0.000	0.000	0.000	0.000	0.000		
9980	451	NAD	NAB	Little Wicomico River	VA S	0	0	0	0	113,316	3,56	113,316	206,870	83,400	0.700	40,300	256,440		
10020	848	SAD	SAW	Lockwoods Folly River	NC S	10588	5050	366	5335	103,839	553,948	584,310	541,100	663,450	2,143,900	688,000	688,000		
10040	218	NAD	NAN	Long Island Intracoastal Waterway	NY S	0	1632	848	827	737,081	609,321	0.220	245,000	669,820	2,793,200	208,420	208,420		
2216	2216	SAD	SAJ	Longcoat Pass	FL S	4083	4183	0	2755	58,273	160,561	162,030	824,100	0.430	28,000	77,570			
588	466	NAD	NAB	Lower Machedoc Creek	VA S	2474	2378	1333	2062	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73592	440	NAD	NAD	Lower Thorofare, Deal Island	MD S	407	25	11	148	296,994	43,723	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
73593	708	NAD	NAB	Lowes Wharf	MD S	0	0	0	0	19,370	572	19,371	0.000	0.000	0.000	0.000	0.000		
354	2	NED	NED	Lubec Channel	ME S	0	40	230401	76814	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
80731	870	SAD	SAC	Lynches River	SC S	0	0	0	0	5,382	767	5,383	0.000	0.000	0.000	0.000	0.000		
10310	675	NAD	NAO	Lymhaven Inlet	VA S	2425	61	1046	1177	204,223	240,439	67,020	726,700	0.000	86,700	681,340			
66666	3622	NCD	NCE	Mackinac City Harbor	MI S	173896	10116	0	91671	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
74211	3624	NCD	NCE	Mackinac Harbor	MI S	128436	161688	10887	100337	1,017	102,009	0.000	0.000	0.000	0.000	0.000			
87062	2118	SAD	SAJ	Madison Bay	ND S	0	0	0	0	1,170	40,40	1,170	0.000	0.000	0.000	0.000	0.000		
87168	2267	LMD	LMK	Madison Parish Port	LA S	162167	140157	257134	186186	0.241	44,936	22,590	0.000	4,000	6,500	0.000	0.000		
41005	343	NAD	NAN	Mamaronock Harbor	MD S	1249	1572	964	1262	0.001	43,510	728,300	77,900	50,000	0.000	0.000	0.000		
10450	287	NAD	NAP	Manasquan River	NJ S	439	772	482	564	258,012	145,605	0.000	197,400	34,900	72,700	336,500			
22770	2118	SAD	SAJ	Manatee River	FL S	6362	4077	0	3480	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
87401	440	POD	POD	Manele Small Boat Harbor	HI S	0	0	0	47,171	351	47,171	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
73594	441	NAD	NAB	Manoklin River	MD S	0	0	0	0	43,510	53	43,510	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10580	767	SAD	SAW	Manteo (Shallowbag) bay	NC S	30529	33039	3675	22432	187,484	4,205,707	4,746,170	8,210,300	6,100,400	6,431,400	2,063,400			
10410	378	NAD	NAN	Matawan Creek	NJ S	0	0	0	0	8,836	272	8,836	89,290	30,900	0.000	0.000	0.000	0.000	0.000
356	113	NED	NED	Matinicus Harbor	ME S	34	63	220	106	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),

AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)

ENR NUMBER	NAME	CITY	STATE	PROJECT NAME	ST.	TYPE	22 TONS	TONNAGE	TONNAGE	AVERAGE TONS		AVERAGE COST (\$ 1994 \$)		AVG O&M (\$ 1977-1994)		\$3 O&M (\$ 1,000 DOLLARS)							
										1992-1994	PER TONS	1994 \$	1994 \$	90 O&M	91 O&M	92 O&M	93 O&M	94 O&M					
41082	523	NAD	NAN	Mattluck Harbor	NY	S	0	0	0	0	0	51,784,360	51,784	326,160	27,000	0,000	65,000	69,200					
73841	268	NAD	NAP	Maurice River	NJ	S	874	381	517	591	7,611	4,496	0,000	0,000	0,000	0,000	0,000	52,200					
74610	805	NAD	NAO	Meherin River	NC	S	0	0	0	0	453,298	0,453	0,000	0,000	0,000	0,000	0,000	0,000					
22250	2106	SAD	SAJ	Melbourne Harbor	FL	S	2156	2952	1894	2334	19,702	45,983	0,000	0,000	0,000	0,000	0,000	0,000					
427	44	NED	NED	Menemsha Creek, Martha's Vineyard	MA	S	9	5	68	27	424,297	11,597	0,000	0,000	0,000	0,000	0,000	0,000					
243	318	NED	NED	Mianus River	CT	S	0	0	0	0	32,600,322	32,600	0,000	0,000	0,000	0,000	0,000	0,000					
73595	402	NAD	NAB	Middle River, Dark Head Creek	MD	S	230	800	343	0,003	0,000	0,000	0,000	0,000	0,000	0,000	0,000						
244	310	NED	NED	Milford Harbor	CT	S	0	0	0	0	56,432,569	56,433	0,000	0,000	0,000	0,000	0,000	0,000					
589	643	NAD	NAO	Milford Haven	VA	S	189	190	187	189	0,005	0,000	0,000	0,000	0,000	0,000	0,000	0,000					
591	640	NAD	NAO	Mill Creek	VA	S	44	7	7	19	0,032	0,000	0,000	0,000	0,000	0,000	0,000	0,000					
8826	NCD	NCR	NCR	Mill Creek and South Slough	IL	S	0	0	0	0	1,701,976	1,702	1,050	2,700	8,000	0,000	4,500	4,500					
11250	342	NAD	NAN	Milton Harbor	NY	S	0	0	0	0	88,159,687	88,160	31,250	0,000	39,500	1,110,000	0,030	0,030					
11310	2324	NC	NC	Minnesota River	MN	S	54,690,6	319,440	411,7783	425,745	0,033	142,092	11,460	24,300	10,840	21,600	20,330	0,000					
73857	240	NAD	NAP	Mispillion River	DE	S	0	80	70	50	4,641,388	232,068	0,010	97,500	151,780	463,700	1,825,180	0,000	0,000				
592	725	NAD	NAB	Monroe Bay Creek	VA	S	12	2	0	5	5,177,335	24,161	0,000	0,000	54,000	41,100	0,000	0,000	0,000				
11790	4225	SPD	SPN	Monterey Harbor	CA	S	8836	206,338	0	9825	7,327	71,980	0,000	0,000	82,700	538,300	0,000	0,000					
493	2009	LND	LNK	Mouth of Yazoo River	MS	S	250,1678	226,4461	27,17256	294,4465	0,010	24,388	107,850	42,000	0,600	45,000	0,000	0,000	0,000				
99984	1	LND	LN	MRF & T-Baton Rouge Harbor	LA	S	0	0	0	0	248,208,944	248,209	206,000	170,000	21,000	0,000	230,000	0,000	0,000	0,000			
99982	2271	LND	LNK	MRF & T-Greenville Harbor	MS	S	0	272,3346	242,9742	17,1763	0,173	296,757	159,000	216,000	94,000	0,000	269,000	0,000	0,000	0,000			
99983	2276	LND	LNK	MRF & T-Vicksburg Harbor	MS	S	409,6105	438,4220	51,07967	45,29431	0,036	162,732	137,000	107,000	0,000	217,000	0,000	0,000	0,000				
40225	1234	NAD	NAB	Muddy Hook/Tyler Coves	MD	S	0	0	0	0	34,463,299	34,463	240,270	10,200	0,080	0,000	0,000	0,000	0,000	0,000			
593	631	NAD	NAO	Mulberry Creek	VA	S	69	32	19	40	0,025	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000			
593	631	NAD	NAO	Mulberry Creek	VA	S	0	0	0	19	0,033	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000			
12020	241	NAD	NAP	Murderkill River	DE	S	0	0	0	0	104,889,533	104,890	20,080	329,000	33,050	31,100	54,710	0,000	0,000	0,000			
88828	NC	NC	NC	Muscatine Harbor	IA	S	0	0	0	0	13,930,688	13,931	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		
72756	4828	NPD	NPA	Naknek River	AK	S	648,19	82,321	61,344	69,495	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000			
73784	665	NAD	NAO	Nansennond River	VA	S	130	43	771,922	33,453	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000				
73584	55890	NAD	NAB	Nanticoke River At Nanticoke	MD	S	0	0	0	26	0,039	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000			
73585	434	NAD	NAB	Nanticoke River & Tributaries	MD	S	0	0	1804	601	0,909	0,547	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		
73549	432	NAD	NAB	Nanticoke River at Bivalve	MD	S	0	0	0	0	75,133	0,755	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000		
12200	207	NAD	NAN	Nanticoke River Northwest Fork	MD	S	339,257	46,693	52,0749	44,683	0,599	266,556	40,730	0,000	4,470,000	50,340	0,000	0,000	0,000	0,000	0,000		
67314	4706	NPD	NPS	Narrows of Lake Champlain	NY	S	86,111	10,651	33,79	33,580	1,301	43,686	64,850	40,000	40,020	37,400	45,520	0,000	0,000	0,000	0,000	0,000	0,000
73566	459	NAD	NAB	Neah Sound	MD	S	601	225	1214	114,511	139,055	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
82121	4691	NPD	NAP	Nehalem Bay	OR	S	0	0	0	0	752,544	0,753	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
74612	831	SAD	SAW	Neuse River	NC	S	105,880	10,0756	12,776	10,946	0,001	0,119	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
1020	3744	NC	NC	New Buffalo Harbor	MI	S	0	0	0	0	179,082,416	179,082	140,990	357,200	182,350	12,500	534,020	0,000	0,000	0,000	0,000	0,000	0,000
8190	5000	NAD	NAP	New Jersey Intracoastal Waterway	NJ	S	89312	45,600	40,907	58,606	31,459	1,843,677	2,448,400	26,380	3,213,970	1,713,900	2,358,790	0,000	0,000	0,000	0,000	0,000	0,000

## SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,

## AVERAGE TONNAGES (1992-1994) AND O&amp;M COSTS PER TON (TOTAL 733)

PROJ #	NAME	STATE	PROJECT NAME	ST.	TYPE	20 TONS	32 TONS	48 TONS	66 TONS	1992-1994	AVERAGE COST PER TONS		AVG O&M TONS (1992-1994)	1977-1994 O&M (\$/TON)	91 O&M (\$/TON)	92 O&M (\$/TON)	93 O&M (\$/TON)	94 O&M (\$/TON)	
											(\$/TON)	(\$/TON)							
74483	2215 SAD SAJ	New Pass Sarasota		FL	S	31	116	50	66	4,487.459	284.676	1,062,180	182,800	0.020	54,400	305,900			
80760	2019 SAD SAJ	New River		FL	S	0	0	1	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
41031	346 NAD NAN	New Rochelle Harbor		NY	S	0	0	0	0	3,991.756	3,992	19,350	40,000	0.000	0.000	0.000	0.000	0.000	0.000
6840	206 NAD NAN	New York St Barge Canal		NY	S	0	0	0	292	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
39018	139 NED NED	Newburyport Harbor		MA	S	0	0	0	0	194,488.751	194,489	293,480	567,400	1,010	419,100	1,050	1,050	1,050	1,050
21640	5736 NAD NAO	Newport News Creek		VA	S	2210	55	42	769	12,442	9,568	0.000	0.000	0.000	186,250	6100	0.000	0.000	
74081	3224 NCD NCB	Niagara River		NY	S	659784	589561	286169	508505	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
12640	4841 NPD NPA	Ninigichik Harbor		AK	S	0	32	48	27	8,614.618	229,723	159,540	1,010	159,600	192,100	191,330	191,330		
72742	4988 NPD NPA	Noine Harbor		AK	S	24023	36770	74902	45232	11,879	537,324	158,880	2,760	241,890	330,900	182,280	182,280		
594	464 NAD NAB	Nomini Bay and Creek		VA	S	292	800	0	364	2,109	0.768	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72430	1273 NED NED	North Cove		CT	S	0	0	0	0	0	75,042.288	75,042	0.000	178,500	412,860	343,500	25,100		
363	106 NED NED	Northeast Harbor		ME	S	45	180	4587	1604	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74614	844 SAD SAW	Northeast Cape Fear River		NC	S	613269	602846	638406	618175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
27009	404 NAD NAB	Northeast River		MD	S	10	0	0	3	16,238.400	54,128	0.000	0.000	0.000	58,300	55,000			
73743	521 NAD NAN	Northport Harbor		NY	S	0	10	4373	1461	2,346	3,487	0.000	50,000	0.000	0.000	0.000	0.000	0.000	
21770	314 NED NED	Norwall Harbor		CT	S	540740	474647	446483	487290	0.330	160,632	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
73769	NAD NAO	Notaway River		VA	S	0	0	0	0	1,669,649	1,670	0.000	12,800	0.000	0.000	0.000	0.000	0.000	
12940	4394 SPD SPN	Noyo River Harbor		CA	S	5651			1884	224,517	441,752	496,740	228,500	470,000	470,000	67,860			
12980	NCD NCB	Oak Orchard Harbor		NY	S	0	0	0	0	23,835,712	23,836	0.000	140,700	35,840	1,000	0.000			
73790	608 NAD NAO	Occohannock Creek		VA	S	102	93	85	93	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
595	454 NAD NAB	Occoquan Creek		VA	S	265226	173940	150917	196694	0.001	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
73567	450 NAD NAB	Ocean City Harbor & Inlet & Stumpuxent Bay		MD	S	11972	10722	9869	10854	46,017	499,486	379,280	169,300	43,910	76,900	65,450			
529	829 SAD SAW	Ocracoke Inlet		NC	S	11895	15047	229	9057	2,945	26,669	5,670	3,100	0.000	0.000	0.000	0.000	0.000	
13240	2048 SAD SAJ	Okeechobee Waterway		FL	S	752796	832118	659751	748222	2,810	2,102,395	1,750,200	2,974,900	2,495,900	4,983,700				
13250	2102 SAD SAJ	Oklawaha River		FL	S	0	0	0	0	42,955,450	42,955	450	28,200	39,100	36,430	52,700	66,780		
44066	3104 NCD NCB	Olcott Harbor		NY	S	0	0	0	0	7,631,312	7,631	0.000	14,900	0.110	0.000	0.000	0.000	0.000	
65017	4933 NPD NPA	Old Harbor, Kodak Island		AK	S	1699	504	255	819	13,988	11,461	0.000	0.000	0.000	0.000	206,300			
73791	606 NAD NAO	Onancock River		VA	S	65743	100265	99977	886862	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
13430	LND LNM	Oscella Harbor		AR	S	0	0	0	0	540,162,498	540,162	345,770	12,800	421,060	321,000	271,190			
13510	612 NAD NAO	Oyster Channel		VA	S	18			6	3,418,022	20,508	0.000	361,200	0.000	0.000	0.000	0.000	0.000	
73793	666 NAD NAO	Pagan River		VA	S	12	8	0	7	1,118,583	7,457	0.000	0.000	0.000	0.000	0.000	134,230		
74615	825 SAD SAW	Pamlico and Tar Rivers		NC	S	1691806	1404711	1532952	1545490	0.011	16,641	57,500	21,000	24,500	81,000	0.000			
73794	649 NAD NAO	Pamunkey River		VA	S	0	0	0	547803	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
7510	2181 SAD SAM	Panacea Harbor		FL	S	0	0	0	0	3,988,748	3,980	9,080	0.100	0.000	0.500	0.000	0.000	0.000	
73568	487 NAD NAB	Parish Creek		MD	S	0	0	0	0	30,471,192	30,471	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
76011	678 NAD NAO	Parker Creek		VA	S	0	0	0	0	54,467,802	54,468	0.000	476,200	73,100	100,000	0.000	0.000	0.000	
596	627 NAD NAO	Parrotts Creek		VA	S	0	29	17	15	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10225	2202 SAD SAM	Pascagoula River		MS	S	7465	3134	254	3618	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
 AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)

PRJ #	WTRWY #	RWS	PROJECT NAME	SI	TYPE	SI TONS	TONNAGE	EDITIONS	TONNAGE	1992-1994 TONS	AVERAGE COST			\$3 O&M [1994 \$]	\$3 O&M 1977-1994 [1994 \$]	\$3 O&M 1977-1994 [1994 \$]		
											TONS	EDITIONS	TONS					
74564	2207	SAD	SAM		Poss Christian Harbor	MS	S	0	0	0	0	0	24,144,444	24,144	0,000	0,000	0,000	197,720
196	2058	LMD	LMN		Poss Manchac	LA	S	56415	72094	51950	60123	0,000	0,000	0,000	0,000	0,000	0,000	
87008	58	NED	NED		Patchogue River	CT	S	0	0	0	0	33,911,956	33,912	0,000	0,000	0,000	0,000	
73569	479	NAD	NAB		Patuxent River	MD	S	86727	227434	53093	122518	0,000	0,000	0,000	0,000	0,000	0,000	
563	52	NED	NED		Pawcatuck River	RI	S	0	0	0	0	18,802,444	18,802	0,000	0,000	0,000	0,000	
73744	530	NAD	NAN		Peconic River	NY	S	0	13	5	6	0,167	0,000	0,000	0,000	0,000	0,000	
72758	4840	NPD	NPA		Pelican Harbor	AK	S	5070	4097	6400	5189	0,203	1,077	0,000	0,000	0,000	0,000	
74819	3791	NCD	NCE		Pensaukeet Harbor	WI	S	0	0	0	0	13,388,539	13,389	0,000	0,000	0,000	263,500	
88813	NCD	I	I		Pepin Small Boat Harbor	WI	S	0	0	0	0	1,111,673	1,112	0,000	0,000	0,000	9,800	
1048	1286	NAD	NAP		Pepper Creek	DE	S	0	0	0	0	1,141,300	1,141	0,000	0,000	0,000	0,000	
13880	2174	SAD	SAM		Perdido Pass Channel	AL	S	0	0	0	0	406,456,812	406,457	733,500	1,100	98,900	14,300	
74617	807	SAD	SAW		Perquimans River	NC	S	4771		1590	0,001	0,000	0,000	0,000	0,000	0,000		
13940	4370	SPD	SPN		Petakuma River	CA	S	314795	207837	251448	251448	2,558	643,152	1,550	0,900	651,690	410,100	
22390	2011	LMD	LMN		Pett Ahse, Tigre, and Carlton Bayous	LA	S	2492692	2320869	2703241	2505601	0,022	55,510	0,000	0,000	0,000	856,070	
73746	5711	NAD	NAN		Plattsburgh Harbor	NY	S	0	0	0	0	6,057,778	6,058	0,000	0,000	0,000	0,000	
73570	447	NAD	NAB		Poconolet River	MD	S	353888	348624	339717	347410	0,318	110,497	438,860	0,000	107,980	59,500	
14220	NCD	NCE	Point Lookout Harbor	WI	S	0	0	0	0	0	0	260,314,404	260,314	8,170	0,000	0,000	466,100	
14310	2097	SAD	SAJ		Ponce De Leon Inlet	FL	S	1173	962	0	712	1,621,930	1,154,274	818,950	65,700	40,130	33,700	
74213	NCD	NCE	Port Austin Harbor	MI	S	0	0	0	0	0	0	67,216,584	67,217	0,000	0,000	0,000	77,510	
15175	LMK		Port Bienville	MS	S	0	0	0	0	0	0	296,339	0,297	0,000	0,000	0,000	100,200	
73747	340	NAD	NAN		Port Chester Harbor	NY	S	307918	333773	371765	337819	1,110	374,881	5,600,000	0,000	0,000	466,100	
21540	3205	NCD	NCB		Port Clinton Harbor	OH	S	0	0	0	0	32,988,950	32,989	0,000	0,000	0,000	37,200	
80524	4936	NPD	NPA		Port Lions	AK	S	53341	75248	84918	71236	1,401	99,830	0,000	0,000	0,000	0,000	
46039	3634	NCD	NCE		Port Sanilac Harbor	MI	S	0	0	0	0	64,061,136	64,061	9,290	0,000	0,000	0,000	
72895	4710	NPD	NPS		Port Townsend Harbor	WA	S	325356	201393	412071	309607	0,020	6,224	5,800	7,000	8,580	0,000	
10221		ORD	ORH		Portsmouth Harbor	OH	S	0	0	0	0	3,981,517	3,982	0,000	67,000	0,450	1,000	
598	1240	NAD	NAB		Potomac River at Mount Vernon	VA	S	0	0	0	0	17,515,317	17,515	0,000	0,000	0,000	2,850	
437	172	NED	NED		Provincetown Harbor	MA	S	0	0	0	0	49,024,1273	49,024	0,000	0,000	0,000	0,000	
8185	3207	NCD	NCB		Put-In-Bay Harbor	OH	S	1082	4667	3531	3093	0,000	0,000	0,000	0,000	0,000	0,000	
795	296	NAD	NAO		Queens Creek	VA	S	0	0	0	0	22,160,547	22,161	57,830	168,200	0,000	0,000	
73573	704	NAD	NAB		Queenstown Harbor	MD	S	0	0	0	0	18,721	0,000	0,000	0,000	0,000	0,000	
14760	4738	NPD	NPS		Quillayute River	WA	S	0	0	15028	5009	119,643	59,930	0,400	526,600	0,330	520,300	
14770	609	NAD	NAO		Quintby Creek	VA	S	44	16	0	20	5,381,014	107,620	1,370	340,800	0,000	14,900	
73892	262	NAD	NAP		Raccoon Creek	NJ	S	0	0	629	210	0,005	0,000	0,000	0,000	0,000	0,000	
14820	3754	NCD	NCE		Racine Harbor	WI	S	7900		2633	26,070	68,652	0,000	0,000	0,000	0,000	0,000	0,000
14850	623	NAD	NAO		Rappahannock River	VA	S	208962	276790	332349	27367	0,011	3,032	0,000	0,000	0,000	0,000	
74722	4134	SPD	SPL		Redondo Beach, King Harbor	CA	S	276	12	74	121	2,856,969	344,741	0,000	185,900	985,000	118,600	
73574	446	NAD	NAB		Rhodes Point to Tylerston	MD	S	0	0	0	0	93,201,117	93,201	0,000	0,000	0,000	62,100	
																	157,600	

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994).**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

PRJ	NAME	DIV	DIS	PRJ NO./NAME	ST.	FEE	SPILLS	TONNAGE	ACTIONS	AVERAGE		1977-1994 (\$/TON)	(\$/TON)	\$1 O&M	\$2 O&M	\$3 O&M	\$4 O&M
										TONS	FEET						
302	2100	SAD	SAJ	Rice Creek	FL	S	101739	105400	109275	105471	0.000	0.000	0.000	0.000	0.000	0.000	
22510	813	SAD	SAW	Roanoke River	NC	S	190826	121593	110044	140854	0.089	12.501	0.000	0.000	0.000	0.000	
80238	703	NAD	NAB	Rock Hall Harbor	MD	S	0	0	0	0	2,292.017	2,292	0.000	0.000	0.000	0.000	
11190	1NCD	NCR	Rock Island Small Boat Harbor	IL	S	0	0	0	0	0	11,921.313	11,921	0.000	0.000	0.000	0.000	
72762	4803	NPD	NPA	Rocky Pass In Keku Str	AK	S	75	0	0	25	0.040	0.000	0.000	0.000	0.000	0.000	
44072	1NCD	NCB	Rocky River Harbor	OH	S	0	0	0	0	0	137,248.487	137,248	27,650	27,650	23,700	22,200	
15600	4652	NPD	NPP	Rogue River Harbor at Gold Beach	OR	S	372	157443	268	52694	15,486	816,003	565,740	1,050,000	929,550	1,063,200	
15490	768	SAD	SAW	Rollinson Channel	NC	S	240	265	57	187	642,025	120,273	8,410	7,000	186,640	2,900	
73705	563	NAD	NAN	Rondout Harbor	NY	S	16367	23704	3803	14625	21,182	309,928	25,840	0.000	0.000	0.000	
87072	2268	LND	LNK	Rosedale Harbor	MS	S	508540	537659	606537	550162	0.439	241,620	323,170	298,300	295,740	379,890	
15640	20	NED	NED	Royal River	ME	S	0	0	0	0	39,421.120	39,421	0.000	0.000	0.000	0.000	
87155	1344	NAD	NAO	Rudge Inlet	VA	S	0	0	0	96	0.010	0.000	0.000	0.000	0.000	0.000	
513	138	NED	NED	Rye Harbor	NH	S	0	0	0	0	27,973.659	27,974	437,810	37,700	0.600	0.000	
73935	3114	NCD	NCB	Sackets Harbor	NY	S	0	32	180	71	24,132	1,705	0.000	0.000	0.000	0.000	
15860	24	NED	NED	Saco River	ME	S	0	0	0	0	102,164.239	102,164	0.200	0.000	412,490	322,400	
8187	8220	SPD	SPK	Sacramento River	CA	S	24082	15000	29000	22694	19,411	440,524	111,700	433,300	490,200	487,200	
74709	4390	SPD	SPN	San Rafael Creek	CA	S	539382			19794	15,331	303,464	1,050	376,800	395,630	476,800	
21980	373	NAD	NAN	Sandy Hook Bay	NJ	S	0	17749	0	5916	42,703	252,644	0.000	100,000	0.040	0.000	
73667	374	NAD	NAN	Sandy Hook Bay at Leonardo	NJ	S	0	0	0	0	33,483.944	33,484	61,250	540,400	10,100	0.000	
74475	856	SAD	SAC	Santee River	SC	S	283	541	325	383	0.003	0.000	0.000	0.000	0.000	0.000	
81247	885	SAD	SAS	Satilla River	GA	S	0	2	0	1	0.942	0.001	0.000	0.000	0.000	0.000	
16390	3731	NCD	NCE	Saugatuck Harbor	MI	S	0	0	0	0	109,145.200	109,145	88,900	4,300	156,700	111,800	
73709	504	NAD	NAN	Saugerties Harbor	NY	S	0	0	0	0	15,381.924	15,582	0.000	0.000	0.000	0.000	
45014	1NCD	NED	NCR	Savanna Small Boat Harbor	IL	S	0	0	0	0	5,254,851	5,255	0.000	0.000	42,400	0.000	
16450	877	SAD	SAS	Savannah River Below Augusta	GA	S	104	368	55	176	4,036,523	709,083	216,880	85,900	67,000	138,600	
16500	3866	NCD	NCE	Saxon Harbor	WI	S	0	0	0	0	26,884,550	26,885	107,790	2,880	0.000	78,300	
444	167	NED	NED	Schittuate Harbor	MA	S	159	99	0	86	0.012	0.000	0.000	0.000	0.000	0.000	
76061	3636	NCD	NCE	Sebewaing	MI	S	0	0	0	0	244,416,162	244,418	1,070	0.000	12,300	4,600	
8193	1203	NED	NED	Sesuit Harbor	ME	S	0	0	0	0	29,435,962	29,436	0.000	0.000	118,600	20,600	
74622	849	SAD	SAW	Shallotte River	NC	S	1631	914	244	930	25,572	23,773	0.000	0.000	9,800	9,400	
41007	228	NAD	NAN	Shark River	NJ	S	0	0	0	0	41,155,490	41,155	3,090	90,000	0.000	49,800	
73710	366	NAD	NAN	Sheepshead Bay	NY	S	0	3219	0	1073	2,942	3,157	58,710	0.000	0.000	0.000	
73644	216	NAD	NAN	Shinnecock Inlet	NY	S	0	0	0	0	88,075,439	88,075	8,000	0.000	545,600	784,400	
41035	375	NAD	NAN	Shoal Harbor Compton Creek	NJ	S	30	700	40	257	478,107	122,714	595,740	0.000	0.000	0.000	
16780	538	NAD	NAN	Shrewsbury River	NJ	S	0	0	0	0	282,116,069	282,816	2,145,930	300,000	0.000	23,800	
16800	762	SAD	SAM	Silver Lake Harbor	NC	S	0	0	0	0	444,145,621	444,146	416,000	681,000	10,600	312,400	
72898	4742	NPD	NPS	Stagit River	WA	S	965	10	20	332	0.003	0.000	0.000	0.000	0.000	0.000	
16910	4683	NPD	NPP	Skamokawa Creek	WA	S	0	0	0	0	18,961,603	18,962	20,920	0.500	0.000	0.000	

SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)

ENR	WATER	DRA	DS	PROJECT NAME	SI	TYPE	SI	TONNAGE	SI	TONNAGE	SI	TONNAGE	SI	TONNAGE	AVERAGE	AVERAGE COST	Avg O&M	90 O&M	91 O&M	92 O&M	93 O&M	94 O&M		
															(1994 \$)	(1977-1994) PER TONS	(1994 \$)	(1994 \$)	(1994 \$)	(1994 \$)	(1994 \$)			
72930	4684	NPD	NPP	Skamokawa Slough	WA	S	0	12	5	6	0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
27010	427	NAD	NAB	Slaughter Creek	MD	S	0	0	0	0	0	35,832,463	35,832	0.000	0.000	0.000	0.000	0.000	0.000	43,900	14,300			
73577	475	NAD	NAB	Smith Creek	MD	S	0	0	0	0	0	213,800	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74623	846	SAD	SAW	Smiths Creek	NC	S	0	0	0	0	0	738,840	0.739	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74624	834	SAD	SAW	Smiths Creek (Pamlico County)	NC	S	6774	6430	2276	5160	0.033	0.169	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73859	246	NAD	NAP	Smyrna River	DE	S	19	42	34	32	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
74625	826	SAD	SAW	South River	NC	S	405	214	1	207	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
75027	2159	SAD	SAU	St. Augustine Harbor	FL	S	2167	1165	4	1112	204,054	226,953	0.000	52,500	1,390	12,100	108,940							
394	461	NAD	NAB	St. Catherine's Sound	MD	S	0	0	0	0	0	41,669,200	41,669	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17310	2223	NCD	NCS	St. Croix River	WI	S	10616	4314	10760	8563	4,950	42,387	0.000	5,300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74219	3702	NCD	NCE	St. James Harbor	MI	S	5013	26566	5467	12349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73579	481	NAD	NAB	St. Jerome Creek	MD	S	0	0	0	0	0	35,835,653	35,835,653	0.000	19,840	256,400	1,430	0.000	0.000	0.000	0.000	0.000	0.000	
74387	2018	SAD	SAJ	St. Johns River - Jacksonville to Lake Harney	FL	S	823229	1220283	1067915	1037142	0.039	40,936	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
58300	3734	NCD	NCE	St. Joseph River	MI	S	0	0	0	0	0	44,541,667	44,541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
17370	2107	SAD	SAJ	St. Lucie Inlet	FL	S	1153	1182	55	797	639,210	509,237	283,130	703,000	102,750	83,600	45,050	50,500	45,050	45,050	45,050	45,050		
74542	2180	SAD	SAM	St. Marks River	FL	S	523407	551533	634888	569946	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
44444	294	NAD	NAB	St. Michaels Harbor	MD	S	829	754	500	694	0.413	0.286	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
73596	462	NAD	NAB	St. Patricks Creek	MD	S	795	92	256	381	22,101	8,420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
88807	NCD	NCS	St. Paul Small Boat Harbor	MN	S	0	0	0	0	0	12,043,138	12,043	0.000	15,000	0.000	100,800	0.300	78,500						
55555	497	NAD	NAB	St. Peters Creek	MD	S	0	0	0	0	0	364,444	364,444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74400	2143	SAD	SAJ	St. Thomas Harbor	VI	S	47119	491438	562236	500264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
42007	604	NAD	NAO	Starlings Creek	VA	S	25	52	14	30	0.033	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
74508	2132	SAD	SAJ	Steinhatchee River	FL	S	1157	1149	0	769	1,106	0.850	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15,500		
17500	4874	NPD	NPX	Strikine River	AK	S	9955	22371	17850	16725	0.410	6,882	16,880	3,000	0.140	0,090	0.000	0.000	0.000	0.000	0.000	0.000		
100005	109	NED	NED	Stonebridge Harbor	ME	S	8314	7884	261	5420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
76064	85	NED	NED	Stony Creek, Bramford	CT	S	0	0	0	0	0	20,969,133	20,969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
74626	819	SAD	SAW	Stumpy Point Bay	NC	S	5937	6348	203	4163	12,517	52,103	0.000	5,800	302,900	0.000	322,900	0.000	0.000	0.000	0.000	0.000		
87433	NCD	NCB	Sturgeon Point	NY	S	0	0	0	0	0	2,118,283	2,118	1,900	5,000	12,600	9,100	11,400	0.000	0.000	0.000	0.000	0.000		
17730	4210	SPD	SPN	Suisun Channel	CA	S	12672	1314	4662	19,003	88,590	470,440	481,700	6,200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17870	4728	NPD	NPS	Swinomish Channel	WA	S	816114	550821	374434	580390	0.496	287,703	81220	529,400	120,200	30,000	117,750							
27650	605	NAD	NAO	Tanger Channel	VA	S	1792	2087	2276	2052	97,744	200,559	0.000	517,100	38,700	23,000	7,840							
17970	LND	LMN	Tangipahoa River	LA	S	0	0	0	0	0	85,311,040	85,311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
41083	501	NAD	NAN	Tanytown Harbor	NY	S	627011	302138	339204	422784	0.112	47,220	0.000	34,800	220,200	85,000	155,000	17,400						
87036	4220	POD	POD	Tau Harbor	AS	S	0	0	0	0	0	26,277,556	26,278	0.000	39,700	441,900	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
174	2232	LND	LMN	Tchefuncte River and Bogue Falta	LA	S	26784	27775	8603	21054	1,354	28,514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
3350	877	SAD	SAS	Thurmond Dam and Reservoir	GA	S	0	0	0	0	0	226,781,519	228,782	54,000	185,400	275,800	200,000	208,700						
40108	710	NAD	NAB	Tightman Island Harbor	MD	S	4909	4	1960	2281	11,518	26,389	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
73598	420	NAD	NAB	Town Creek	MD	S	802	336	0	379	70,783	26,892	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	528,400	0.000	

## SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&amp;M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&amp;M COSTS (1977-1994) ,

## AVERAGE TONNAGES (1992-1994) AND O&amp;M COSTS PER TON (TOTAL 733)

ITEM	MTWY	DV	DS	PROJECT NAME	SI	TIE	SIGN	EDGES	MAINS	TONS	AVERAGE TONNAGE 1992-1994		AVERAGE COST (1994 \$)		AVG O&M 1977-1994		O&M 1994		
											PER TONS	1994 \$	TONS	1994 \$	TONS	1994 \$	TONS	1994 \$	
1	1	SAD	SAC	Town Creek	SC	S	0	0	0	0	0	600,824,940	600,825	354,860	622,600	436,370	0,000	499,230	
	73600	419	NAD	NAB	Tred Avon River	MD	S	195534	244395	282719	240883	0,245	58,991	0,000	0,000	0,000	0,000	66,810	
	74629	832	SAD	SAW	Trent River	NC	S	200	1122	0	441	0,002	0,000	0,000	0,000	0,000	0,000	0,000	
	18510	2400	SWD	SWG	Trinity River	TX	S	2800			933	790,258	737,574	1,657,930	639,100	487,860	55,300	1,648,650	
	73601	424	NAD	NAB	Tuckahoe River	MD	S	0	0	0	0	1,353,450	1,353	0,000	0,000	0,000	0,000	0,000	
	18580	290	NAD	NAP	Tuckerton Creek	NJ	S	0	0	0	0	1,560,400	1,560	0,000	0,000	0,000	0,000	0,000	
	73602	448	NAD	NAB	Twitch Cove & Big Thorofare River	MD	S	640	320	7658	2873	53,283	153,092	0,000	812,540	48,700	26,350		
	76107	679	NAD	NAO	Tylers Beach	VA	S	0	0	0	0	47,982,977	47,983	0,000	159,700	191,810	51,000	0,000	
	73604	439	NAD	NAB	Upper Thorofare, Deal Island	MD	S	1768	42120	6683	16924	2,736	46,297	0,000	0,000	0,000	0,000	0,000	
	74688	2500	SWD	SWL	Upper White River	AR	S	18300	17400	13200	16333	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
	602	634	NAD	NAO	Urbanna Creek	VA	S	13762	17553	22343	17886	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
	72949	NPD	NFA	Valdez Harbor	AK	S	0	0	0	0	3,713,739	3,714	0,000	0,000	0,000	0,000	0,000	0,000	
	44003	3216	NCD	NCB	Vermillion Harbor	OH	S	0	0	0	0	124,672,773	124,673	0,000	302,900	66,290	1,800	0,750	
	19150	1335	SAD	SAC	Village Creek	SC	S	580	411	108	366	2,316	0,848	0,000	0,000	0,000	0,000	0,000	
	74002	852	SAD	SAC	Waccamaw River	SC	S	9	6	2	6	95,518	0,542	0,000	0,000	0,000	0,000	0,000	
	73328	4449	POD	POD	Walanae Boat Harbor	HI	S	0	0	0	0	0	2,371,760	2,372	5,260	0,000	7,000	0,000	0,000
	451	174	NED	WAREHAM HARBOR	MA	S	20	31	0	17	0,059	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
	48011	3844	NCD	NCS	Warroad Harbor	MN	S	0	0	0	0	36,908,444	36,908	0,000	0,000	0,000	0,000	0,000	
	74235	NCD	NCR	Watseka Small Boat Harbor	IL	S	0	0	0	0	5,402,874	5,403	71,930	26,900	0,150	0,000	0,000	0,000	
	73605	425	NAD	NAB	Warwick River	MD	S	703	208	0	304	13,864	4,210	0,000	0,000	0,000	0,000	0,000	
	202	2072	LMD	LNH	Waterway from Empire to the Gulf	LA	S	663716	853513	6855417	73215	0,082	59,964	18,660	423,390	2,900	1,000		
	8100	236	NAD	NAP	Waterway from Indian River to Rehoboth	DE	S	0	0	0	0	16,622,252	16,622	0,000	25,800	0,000	0,000	0,000	
	452	173	NED	Wellfleet Harbor	MA	S	0	0	0	0	50,370,872	50,371	0,000	0,000	0,000	0,000	31,890		
	39023	132	NED	Wells Harbor	ME	S	0	0	0	0	21,889,473	21,889	58,540	54,800	3,050	0,000	0,000		
	74025	NCD	NCE	West Harbor	CH	S	0	0	0	0	85,028,929	85,429	17,450	56,100	82,000	127,000	273,730		
	41003	352	NAD	NAN	Westchester Creek	NY	S	254946	297088	227112	259715	1,019	264,780	82,620	1,075,400	180,010	0,000	0,000	
	256	316	NED	Westcott Cove	CT	S	0	0	0	0	11,862,511	11,863	0,000	0,000	0,000	0,000	0,000		
	72823	46	NED	Westport River	WA	S	26	7	13	15	0,065	0,000	0,000	0,000	0,000	0,000	0,000		
	19850	3840	NCD	NCE	Whitefish Point Harbor	MI	S	0	0	0	0	14,063,389	14,063	135,850	13,500	0,000	0,000	0,000	
	605	635	NAD	NAO	Whitings Creek, Middlesex County	VA	S	0	0	0	0	24,780,062	24,780	167,900	100	0,000	0,000	218,800	
	73606	437	NAD	NAB	Wicomico River	MD	S	964466	1043520	1140910	1049632	0,572	600,202	55,620	76,300	156,330	596,000	617,130	
	72690	4645	NPD	NPB	Willamette River Above Philnd & Vmth	OR	S	0	0	0	0	0,000	0,000	0,000	0,000	0,000	0,000	0,000	
	73801	669	NAD	NAO	Willoughby Channel	VA	S	8	15	16	13	1,501,880	1,524	0,000	0,000	0,000	0,000	351,440	
	73938	3119	NCD	NCB	Wilson Harbor	NY	S	0	0	0	0	21,275,219	21,275	0,000	15,500	27,980	2,600	0,000	

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

ENR #	WATER WAY #	DIS-	PROJECT NAME	ST.	TYPE	SECTION	EDITIONS	TONNAGE (1992-1994)	AVERAGE TONS (1992-1994)	AVERAGE COST (1994 \$)		AVG O&M 1977-1984 \$/TON (\$1,000'S. DOLLARS)	AVG O&M 1994 \$/TON (\$1,000'S. DOLLARS)
										PER TONS	PER TON		
88417	NCD	NCS	Winona Commercial Harbor	MN	S		0	0	0	1,052,728	1,058	0,000	
88816	NCD	NCS	Whitona Small Boat Harbor	MN	S	0	0	0	0	1,084,722	1,085	0,000	15,000 0,000
73802	734	NAD	Winter Harbor	VA	S	5	10	9	8	2,971,692	23,774	0,000	104,800 0,000
74393	2128	SAD	Withacoochee River	FL	S	0	162594	385730	182775	0,009	1,573	0,000	0,000 3,800
20160	2206	SAD	Wolf and Jordan Rivers	MS	S	0	0	0	0	78,022,611	78,023	0,000	0,000 24,850
20150	2232	LMD	Wolf River Harbor	TN	S	1464253	1697204	1477535	1546331	0,391	605,053	312,150	344,100 290,800
391	130	NED	Wood Island Harbor	ME	S	0	0	0	0	29,243,416	29,243	0,010	10,100 0,000
457	180	NED	Woods Hole Channel	MA	S	300618	363487	161256	275120	0,000	0,000	0,000	0,000 0,000
21500	4802	NPD	Wrangell Harbor	AK	S	324988	690614	564805	526772	0,061	32,149	61,040	30,700 41,300
87165	820	SAD	Wrights Creek	NC	S	5022	2217	1	2413	7,264	17,531	0,000	0,000 0,000
74632	837	SAD	WW connecting Pamlico S. & Beaufort Harbor	NC	S	27259	19218	5471	17316	11,068	191,660	2,640	4,200 486,500
74637	771	SAD	WW connecting Swanquarter Bay & Deep Bay	NC	S	1039	655	77	590	32,047	16,918	0,000	0,000 35,100
188	2073	LMD	WW from Inland Waterway to Bayou DuLac	LA	S	915673	411083	518435	616064	0,155	95,339	0,000	0,000 41,300
74633	810	SAD	WW, Norfolk to Sounds of North Carolina	NC	S	2047	5290	2744	3360	0,000	0,000	0,000	0,000 263,890
20300	4670	NPD	Yaguina River	OR	S	0	0	0	0	37,216,706	37,217	0,000	0,000 228,600
20350	2010	LMD	Yazoo River	MS	S	728228	623058	764996	705427	0,039	27,691	4,310	0,000 65,000
15410	1540	NCD	Yellow Bend Port	AR	S	0	0	0	0	11,135,428	11,135	0,000	0,000 104,540
73804	654	NAD	York River to Back Creek	VA	S	708	1224	500	811	0,001	0,000	0,000	0,000 0,000
20390	4608	NPD	Young Bay and River	OR	S	0	0	17480	5827	0,000	0,000	0,000	0,000 0,000
20410	8220	SPD	Yuba River	CA	S	0	0	0	0	540,678	0,541	0,000	0,000 6,000
87343	3943	NCD	Zippel Bay Small Boat Harbor	MN	S	0	0	0	0	1,411,424	1,411	0,000	24,400 0,430
73865	293	NAD	Abscon Creek	NJ	S	0	0	0	0	597,000	0,597	0,000	0,000 0,000
578	453	NAD	Accolint Creek	VA	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
87132	87132	POD	Agat Small Boat Harbor	GU	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
87427	SAD	SAJ	Aguadilla Harbor	PR	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
153	2234	LMD	Amite River and Bayou Manchac	LA	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
554	194	NED	Apponaug Cove	RI	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
73827	247	NAD	Appoquinimink River	DE	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
74463	1343	SAD	Archers Creek	SC	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
87674	87674	NED	Aunt Lydia's Cove	MA	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
325	11	NED	Bogaduce River	ME	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
		NAD	Bandon Small Boat Basin	OR	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
326	105	NED	Bax Harbor	ME	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000
327	108	NED	Bass Harbor Bar	ME	S	0	0	0	0	0,000	0,000	0,000	0,000 0,000

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

PROJ #	WT/WY	DAY	DIS	PROJECT NAME	SI	TYPE	SECTIONS	TONNAGE	AVERAGE COST		AVG O&M (1994 \$)	1977-1984 (\$/TON)	92 O&M (\$/TON)	93 O&M (\$/TON)	94 O&M (\$/TON)
									1992-1994	1992-1994 PER TONS					
2406	SWD	SWG	Bastrop Bayou	TX	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NCD	NCS	Bay City Harbor	WI	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1060	LMD	LMK	Bayou Bartholomew	LA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
156	2241	LMV	Bayou Grosse Tete	LA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
163	2249	LMD	Bayou Queue de Tortue	LA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100006	NCD	NCE	Beaver Bay	MN	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
504	30	NED	NED	NHD	NH	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87461	NAD	NAO	Bennett Creek, City of Suffolk	VA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74593	845	SAD	Black River	NC	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12157	2501	SWD	Black River, Alabama	MKO	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27028	674	NAD	Blackwater River	VA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74554	2203	SAD	Bluff Creek	MWS	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
329	125	NED	Boothbay Harbor	MIE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73548	435	NAD	Broad Creek River	DE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73828	239	NAD	Broadkill River	DE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
-100001	NED	NED	Bucks Harbor, Machiasport	MIE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2210	1023	NED	Bunker Harbor	MIE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2330	LMV	LMK	Caddo Lake	LA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74521	SAD	SAM	Calhada River	AL	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
332	116	NED	Camden Harbor	MIE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
336	18	NED	Cathance River	MIE	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87215	SAD	SAJ	Cedar Island Keaton Beach	FL	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2820	3804	NCD	NCE	Cedar River Harbor	MII	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74598	769	SAD	Channel from Pamlico Sound to Rodanthe	NC	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73795	5737	NAD	Channel from Phoebeus	VA	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73728	NAD	NAN	Channels between NMS Hero Islands	VT	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10307	ORD	ORH	Charlestown River Front Park	WV	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74300	3935	NCD	NCE	Chippewa Harbor (Isle Royale)	MII	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74533	2187	SAD	Chocatawhatchee River	FL	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3340	4620	NPD	NPP	Clatskanie River	OR	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
337	100	NED	NED	Cobscook Bay	ME	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
505	29	NED	NED	Cocheco River	NH	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72863	8694	NFD	NFS	Columbia River, Wenatchee to Kettle Falls	WA	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74602	1254	SAD	SAW	Contentnea Creek	NC	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73870	258	NAD	NAP	Cooper River	NJ	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73561	410	NAD	NAB	Corsica River	MD	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74487	2103	SAD	SAJ	Courtenay Channel	FL	S		0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16840	NPD	NFA	Crescent Bay Basin, Sitka Lbr.	AK	S			0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

ENI	NAME	DAY	DAYS	PROJECT NAME	SI	TYPE	#2 TONS	\$3 TONS	\$4 TONS	AVERAGE							
										TONS	1992-1994	TONS	1992-1994	TONS	1992-1994	TONS	1992-1994
										AVERAGE COST (1994 \$)	AVG O&M 1977-1994	\$0 O&M (1994 \$)	\$1 O&M (1994 \$)	\$2 O&M (1994 \$)	\$3 O&M (1994 \$)	\$4 O&M (1994 \$)	
152	2246	LMV	LMK	Cypress Bayou	LA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73563	728	NAD	Cypress Creek	ND	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
351	15	NED	NED	Damarscott River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
75117	603	NAD	NAO	Deep Creek, Arcomack City	IA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73786	269	NAD	Dennis Creek	IU	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73877	289	NAD	Double Creek	IU	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	342	124	NED	East Boothbay Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73684	345	NAD	Echo Bay Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	74470	867	SAD	Edisto River	SC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73581	405	NAD	Elk/Little Elk Rivers	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	412	35	NED	Essex River	MA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	506	32	NED	Exeter River	NH	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	74577	782	SAD	Fancy Bluff Creek	GA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	4315	SPD	SPK	Feather River	CA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	87327	POD	POD	Fernandina Harbor	FL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	74686	814	SAD	Fishing Creek	NC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	5910	320	NED	Fivemile River Harbor	CT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	87617	SAD	SAM	Fort Gaines, Dauphin Island	AL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	21050	POD	POD	Fort Madison Small Boat Harbor	IA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	74956	1048	NED	Frenchboro Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	74970	INCD	INCB	Geneva-on-the-Lake	OH	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73687	515	NAD	Glen Cove Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	73729	NAD	NAN	Gordon's Landing, Lake Champlain	VT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
		73878	270	NAD	Goschen Creek	NJ	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
	179	2236	LMD	Grand Bayou Pass	LA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	6730	3857	NCD	Grand Traverse Bay Harbor	MI	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
		73689	NAD	Great Cazay River	NJ	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
		73690	382	NAD	Great Kills Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
		561	82	NED	Greenwich Bay	RI	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
		345	19	NED	Harraseeket River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
		13141	ORD	Hastings Harbor	NH	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
		346	126	NED	Hendricks River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
		419	165	NED	Hingham Harbor	MA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
		87514	NAD	Holmes Creek	FL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
			13141	ORD	Huntington River Front Pk.	WV	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
			423	34	NED	Ipswich River	MA	S	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
			8280	137	NED	Isle of Shoals Harbor	ME	S	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
			8280	137	NED	Isle of Shoals Harbor	NH	S	0	0	0.000	0.000	0.003	0.000	0.000	0.000	

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

ENI	NAME	DX	DIS	PROJECT NAME	SI	TYPE	% TONS	TONS	\$ TONS	AVERAGE TONS 1992-1994		AVG O&M (\$ 1994 \$)	1977-1994	\$O O&M	\$1 O&M	\$2 O&M	\$3 O&M	\$4 O&M	
										TONS	TONS								
10640	MRD	MRO		Ivy Boat and Canoe Club	IL	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76092	1010	NED		Jonesport Harbor	ME	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87090	4460	POD		Kalaupapa Harbor, Molokai	HI	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	4833	NPD	NPA	Kapitol Harbor	AK	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	1261	NAD	NAO	Kings Creek	VA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90330		NPD	NPS	Kingston Harbor	WA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12222	2115	SAD	SAA	Kissimmee River	FL	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9280	1324	NED	NED	Lagoon Pond, Martha's Vineyard	MA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
508	31	NED	NED	Lamprey River	NH	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74297		NCD	NCS	Lansing Harbor	IA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9480	344	NAD	NAN	Larchmont Harbor	NY	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87310		POD	POD	Laupahoehoe Harbor	HI	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76556		SAD	SAM	Leaf-Chickasawhay River	MS	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
73850	558	NAD	NAP	Little Egg Harbor	NJ	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
425	179	NED	NED	Little Harbor, Woods Hole	MA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27013	NCD	NCD	NCB	Little River	NY	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87422		SWD	SWL	Little Rock Port	AR	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
492		LMD	LMK	Little Tallatchie River	MS	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
587	639	NAD	NAO	Locklites Creek	VA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87494		NCD	NCE	Lorain Small Boat Harbor	OH	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74053	3930	NCD	NCE	Lutsen Harbor	MN	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9290		POD	POD	Mauiaea Small Boat Harbor	HI	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
355	4	NED	NED	Machias River	ME	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10350	815	SAD	SAV	Mackay Creek	NC	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
426	155	NED	NED	Maiden River	MA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10820		NPD	NPS	Mats Mats Bay	WA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80312	650	NAD	NAO	Mataponi River	VA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
357	14	NED	NED	Medomak River	ME	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
428	33	NED	NED	Mermac River	MA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
591	493	NAD	NAB	Mill Creek	MD	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74473	854	SAD	SAC	Mingo Creek	SC	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	LMD	LMS		Moccasin Springs	MO	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11710	4305	SPD	SPK	Mohekimma River	CA	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
358	72	NED	NED	Moosabec Bar	ME	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87425		ORD	ORN	Morgan County-Decatur Port	AL	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11840		NAD	NAN	Moriches Inlet	NJ	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
74079	3906	NCD	NCB	Morrisstown Harbor	NY	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22222	1241	NAD	NAB	Nan Cove	ND	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

SHALLOW-DRAFT NAVIGATION PROJECTS:

ACTUAL O&M EXPENDITURES (1990-1994); WATERBORNE COMMERCE (1992-1994); AND AVERAGE O&M COSTS (1977-1994),  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)

ENR	NAME	DIV.	RS.	PROJECT NAME	ST.	TYPE	AVERAGE TONS			AVERAGE COST (\$ 1994 \$)			AVERAGE COST (\$ 1994 \$)			
							1992	1993	1994	1992	1993	1994	1992	1993	1994	
73782	607	NAD	NAD	Nandua Creek	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
359	6	NED	NED	Narraguagus River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
80234	455	NAD	NAB	Neabsco Creek	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
33333	1329	NAD	NAB	Neavitt Harbor	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
362	122	NED	NED	New Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
74613	806	SAD	SAW	Newbegun Creek	NC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
21720	63	NED	NED	Niantic Bay & Harbor	CT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
87508	LMD	LMD	North Pass	North Pass Manchac, Tangipahoa Parish	LA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
74557	SAD	SAM	Noxubee River	MS	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
13020	2260	LMD	Obion River	TN	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
87573	SAD	SAD	Ochlockonee River	FL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
13290	4300	SPD	SPK	Old River	CA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
73891	263	NAO	NAO	Oldmans Creek	NJ	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
10128	SAD	SAD	Oostenauka-Coosawattee River	GA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73632	NAD	NAN	Otter Creek	VT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
13490	119	NED	NED	Owl's Head Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
74858	SWD	SWG	Oyster Creek	TX	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
300	2122	SAD	SAD	Osuna	FL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
564	80	NED	NED	Pawtuxet Cove	RI	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
73745	502	NAD	NAN	Peekskill Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
74454	811	SAD	SAW	Pembroke Creek	NC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
13970	134	NED	NED	Pepperell Cove	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
7470	3704	NCD	NCE	Petoskey Harbor	MI	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
100003	NED	NED	Pig Island Gut	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
74385	2124	SAD	SAS	Pithiachacotee River	FL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
71346	5	NED	NED	Pleasant River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
73748	507	NAD	NAN	Port Henry Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
87440	ORD	ORN	Port of Florence	AL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73756	739	NAD	NAO	Portsmouth Hor., VA Channel/Nansentond	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
73571	721	NAD	NAB	Patomac River at Lower Cedar Point	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
565	51	NED	NED	Potowomut River	RI	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
14670	NCD	NCB	Pultneyville Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
519	257	NAD	Rancocas River	NJ	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	1323	NED	Red Brook Harbor, Bourne	MA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
371	NED	Richmond Harbor	ME	S	0	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
371	129	NED	Richmond's Island Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73707	214	NAD	Rouses Point	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73708	531	NAD	Sag Harbor	NY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,  
AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733)**

ENR	WTR	BYX	DIS	PROJECT NAME	SI.	TYPE	\$1 TONS	\$1 TONS	TONS	AVERAGE COSTS			\$1 TON	\$1 TON	\$1 TON	
										(1994 \$)	1977-1994 (\$1994 \$)	1977-1994 (\$1994 \$)	TONS	1992-1994 TONS	1992-1994 TONS	
7474	872	SAD	SAC	Salkehatchie River	SC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000
376	NED	NED	Sasama River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
21800	23	NED	Scarboro River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
74621	816	SAD	Scuppernong River	NC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
1232	NAB	NAB	Shad Landing State Park Marina	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
87544	NAB	NAB	Shallow Creek	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
72817	4665	NPD	Smith River	OR	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
378	123	NED	South Bristol Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
79710	SAD	SAD	South Brunswick River	GA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
252	312	NED	Southport Harbor	CT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
381	107	NED	Southwest Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	NCD	NCR	Squaw Chute at Quinicy	IL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73732	NAD	NAN	St. Albans Harbor	VT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
382	1	NED	St. Croix River	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
79130	NAD	NAB	St. George Creek	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73860	242	NAD	St. Jones River	DE	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
254	302	NED	Stoneington Harbor	CT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
385	NED	NED	Sullivan Falls Harbor	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
104	LMD	LMN	Sulphur River	AR	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
74391	2130	SAD	Sau	SWANNEE RIVER	FL	S	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73733	NAD	NAN	Swanton Harbor	VT	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
74627	1255	SAD	Swift Creek	NC	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
74523	SAD	SAM	Tallapoosa River	AL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
1336	NAD	NAO	Tastinas Creek	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
446	47	NED	Tauton River	MA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
201	2233	LMV	Tidewater, Natalibany, P&B R.	LA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
87510	SAD	SAM	Tombigbee River at Columbus Port	MS	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73894	288	NAD	Toms River	NJ	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
21660	628	NAD	Toluskey Creek	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
87453	NCD	NCB	Toussaint River, Carroll Township	OH	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
71175	2330	ORD	Tradewater River	KY	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
73603	436	NAD	Tyaskin Creek	MD	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
387	NED	NED	Union Harbor, (Union River)	ME	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
74543	2184	SAD	Upper Chipola River	FL	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
601	458	NAD	Upper Machodoc Creek	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
	NCD	NCS	Watasha Harbor	MN	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	
87509	NAD	NAO	Wachapreague Channel, Accomack County	VA	S	0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	

**SHALLOW-DRAFT NAVIGATION PROJECTS:**

**ACTUAL O&M EXPENDITURES (1990-1994) ; WATERBORNE COMMERCE (1992-1994) ; AND AVERAGE O&M COSTS (1977-1994) ,**

**AVERAGE TONNAGES (1992-1994) AND O&M COSTS PER TON (TOTAL 733 )**

ENR	NAME	DIV	DIS	PROJECT NAME	ST.	TYPE	92 TONS	93 TONS	94 TONS	AVERAGE		AVG O&M 1992-1994 (\$ 1994 \$)	AVG O&M 1977-1994 (\$ 1994 \$)	\$1 O&M 1992-1994 (\$1,000'S DOLLARS)	\$1 O&M 1977-1994 (\$1,000'S)	
										TONS	TONS					
59250	NAD	NAN		Wappinger Creek	NY	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
572	50	NED	NED	Warren River	RI	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
19480	81	NED	NED	Warwick Cove	RI	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
73671	386	NAD	NAN	Washington Canal and South River	NJ	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
74477	874	SAD	SAC	Wateree River	SC	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
73636	376	NAD	NAN	Waycake Creek	NJ	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
87102	NPD	NPS		Westhaven Cove Small Boat Basin	WA	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
257	313	NED	NED	Westport Harbor & Saugatuck River	CT	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
87632	NPD	NPP		Westport-Puget Sound	WA	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
573	197	NED	NED	Wickford Harbor	RI	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
76063	SPD	SPN		Wilmington Harbor	DE	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
79090	NED	NED		Winnipesaukee Lake	NH	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
20110	1047	NED	NED	Winter Harbor	ME	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
456	151	NED	NED	Winthrop Harbor	MA	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
19850	1329	NAD	NAO	Wishart Point Channel	VA	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
73672	389	NAD	NAN	Woodbridge Creek	NJ	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
73896	260	NAD	NAP	Woodbury Creek	NJ	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
497	LMD	LMK		Yalobusha River	MS	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
392	27	NED	NED	York Harbor	ME	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
485	NCD	NCS		Zipper Bay	MN	S	0	0	0	0	0	0,000	0,000	0,000	0,000	
TOTALS							11651584.00	125053443.00	12824890.00	123384642	0465157411441	55,776,150	62,024,770	52,057,500	69,469,900	
													66,632,960			

NOTES: (1) Waterborne Commerce Data from the USACE Waterborne Commerce Statistics Center, New Orleans, LA

(2) O&M Expenditures from the Corps Navigation Cost Recovery Database System reports, USACE, Institute for Water Resources

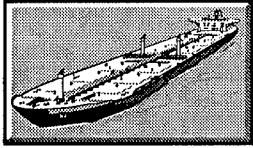
(3) For projects with zero tonnage, the tonnage was set to one for the purpose of computing the average O&M cost per ton.

(4) For projects with zero average O&M (77-94), the O&M was set to one for the purpose of computing the average O&M cost per ton.

PWI = Project Work Item

WTWY = Waterway Code

TYPE S= Shallow Draft Project



**Navigation Operation and Maintenance:  
Expenditures for Harbors and Waterways  
Fiscal Year 1996**

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**APPENDIX K - Shallow Draft Navigation Projects  
Subject to the Inland Waterway Fuel Tax,  
Analysis by Segment, O&M Expenditures,  
Average Ton-Miles per year, and Annual  
O&M Cost per Ton-Mile**

**SHALLOW DRAFT NAVIGATION PROJECTS SUBJECT TO INLAND WATERWAY FUEL TAX,  
ANALYSIS BY SEGMENT, O&M EXPENDITURES, AVERAGE TON-MILES PER YEAR,  
AND ANNUAL O&M COST PER YEAR**

SEGMENT	OPERATION (MILES)	AVERAGE ANNUAL TON-MILES (BB)		AVERAGE ANNUAL WATERWAY (BB)		O&M COST (MM)	PERCENT OF O&M COST TON-MILES	O&M COST SHARE TON-MILE SHARE	AVERAGE ANNUAL O&M COST PER TON-MILE
		TON-MILES PER MILE	TON-MILES PER MILE	O&M COST (MM)	TON-MILES				
Alabama-Coosa	314	149,604	476	7,372.90	0.06	1.74	29,000	4,928	
Allegheny	72	50,475	701	7,975.50	0.02	1.88	94,000	15,801	
Appalachica-Chattahoochee-Flint	291	66,024	227	8,427.14	0.03	1.99	66,333	12,764	
Arkansas	448	1,814,784	4,051	25,558.22	0.69	6.04	8,754	1,408	
Atchafalaya-Old	121	587,550	4,856	1,507.42	0.22	0.36	1,636	0.257	
Atlantic Intracoastal (AIWW)	1192	356,604	299	17,705.40	0.14	4.18	29,857	4,965	
Black Warrior-Tombigbee	453	5,876,988	12,973	13,367.28	2.23	3.16	1,417	0.227	
Columbia-Snake	276	1,387,730	5,028	7,683.86	0.53	1.84	3,472	0.560	
Cumberland	314	1,342,155	4,274	7,901.68	0.51	1.87	3,667	0.589	
Green-Barren	108	525,543	4,866	1,320.93	0.2	0.31	1,550	0.251	
Gulf Intracoastal (GIWW)	1134	21,353,637	18,830	32,773.44	8.1	7.75	9,957	0.153	
Illinois	349	9,024,253	25,857	16,431.54	3.42	3.88	1,135	0.182	
Kanawha	91	1,537,022	16,890	8,447.72	0.58	2.00	3,448	0.550	
Kaskaskia	36	55,587	1,544	1,719.62	0.02	0.41	20,500	3,094	
Kentucky	82	17,118	209	2,162.43	0.01	0.51	51,000	12,632	
Lower Mississippi	720	116,392,506	161,656	58,895.55	44.13	13.92	0.315	0.051	
Middle Mississippi	195	18,594,214	95,355	11,765.14	7.05	2.78	0.394	0.063	
Missouri	735	639,329	870	6,027.98	0.24	1.42	5,917	0.943	
Monongahela	129	1,441,407	11,174	12,886.99	0.55	3.05	5,545	0.894	
Ohio	981	58,465,957	59,598	45,391.90	22.17	10.73	0.484	0.078	
Ouachita-Black	351	127,259	363	4,426.78	0.05	1.05	21,000	3,479	
Pearl (West Pearl)	58	7	0	625.84	0	0.15	0	8692,222	
Red	236	368,405	1,561	5,497.62	0.14	1.30	9,286	1,492	
Tennessee	652	6,876,376	10,547	11,406.32	2.61	2.70	1,034	0.166	
Tennessee-Tombigbee	234	984,071	4,205	15,740.24	0.37	3.72	10,054	1,600	
Upper Mississippi	663	15,641,025	23,591	87,238.70	5.93	20.62	3,477	0.558	
White	244	82,616	339	1,996.09	0.03	0.47	15,667	2,416	
Willamette	26	8,587	330	774.59	0	0.18	0	9,021	
Total	10505	263,766,833	25,109	423,113.82	100.03	100.01	1,000	0.160	

Source: Traffic and Cost Relationships of the Inland Waterway System, draft paper by Dr. Larkin Warner and Jack Lane, U.S. Army Corp of Engineers, Institute for Water Resources, July 1996

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13. ABSTRACT (Maximum 200 words) This report documents the actual Fiscal Year FY 1996 expenditures for the operation and maintenance (O&M) of U.S. Army Corps of Engineers navigation projects. These costs were developed using the Corps Navigation Cost Recovery Database System (NCRDBS). The NCRDBS contains operation and maintenance expenditures dating from Fiscal Year FY 1977 for commercial navigation, other and joint purposes for all projects with navigation as an authorized purpose.  The database is organized into three components: deep draft navigation projects subject to the Harbor Maintenance Tax (HMT); shallow draft harbor projects subject to the Inland Waterway Fuel Tax; and shallow draft projects not subject to the fuel tax. Navigation O&M costs for deep draft projects and shallow draft harbors not subject to the fuel tax are recovered from the Harbor Maintenance Trust Fund (HMTF).			
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